HECO T-12
DOCKET NO. 2006-0386

TESTIMONY OF

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COMPENSATION AND BENEFITS
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: A&G Expenses
Employee Benefits

INTRODUCTION

Q. Please state your name and business address.

A. My name is Julie K. Price, and my business address is 220 South King Street, Honolulu, Hawaii.

Q. By whom are you employed and in what capacity?

A. I am the Manager of Compensation & Benefits for Hawaiian Electric Company, Inc. ("HECO"). My work experience and educational background are shown in HECO-1200.

Q. What will your testimony cover with respect to this case?

A. My testimony will cover HECO's 2007 adjusted test year estimates for employee benefits expenses which are included in total Administrative and General ("A&G") expenses, discussed by Ms. Patsy Nanbu in HECO T-10. I will also cover the wage and salary increase, the Human Resources Suite software project and the Ho'okina award program expenses included in the test year.

DESCRIPTION OF ACCOUNTS

Q. In what accounts does HECO record employee benefits expenses?

A. Employee benefits expenses are recorded in account no. 926000, employee pension and benefits, which includes expenses related to providing pension and other retirement benefits to employees, long-term disability benefits, training, and other miscellaneous benefits, and account no. 926010, employee benefits – flex credits, which includes expenses related to providing group insurance benefits to employees. Benefits provided to regular employees are described in HECO-WP-1250.

Q. How will you explain these employee benefits expenses?

A. Since these accounts include a broad range of employee benefits expenses, our explanation will breakdown non-labor expenses into the following general categories to facilitate analysis:

Account No. 926000 - Employee Pensions and Benefits

Qualified Pension Plan
Non-Qualified Pension Plans
Other Postretirement Benefits
Long-Term Disability Benefits
Other Benefits/Administration

Account No. 926010 - Employee Benefits – Flex Credits

Flex Credits Less Prices
Group Medical Premiums
Group Dental Premiums
Group Vision Premiums
Group Life Insurance Premiums
Other/Administration

The test year amounts by these categories are provided in HECO-1201.

Labor costs to administer the programs are also included in these accounts. Labor rates used to determine labor costs for the test year are discussed by Ms. Patsy Nanbu in HECO T-10.

Q. Are all employee benefits costs charged to operations and maintenance ("O&M") expense?

A. No. The employee benefits costs charged to O&M expense are a net amount resulting from

(1) the total cost of employee benefits (account nos. 926000 and 926010), less
(2) the amounts transferred to construction and to other (account no. 926020).

The amounts transferred to construction and to other (account no. 926020) are covered by Ms. Patsy Nanbu in HECO T-10.

ADJUSTMENTS/NORMALIZATIONS

Q. Were any adjustments made to employee benefits expenses for this rate case?

A. Yes. These adjustments are shown in HECO-1201, column (h). Rate case adjustments were made to delete certain benefit expense items in order to simplify and limit the issues in this case. Other budget adjustments were made to update estimates made subsequent to preparation of the budget. Individual adjustments are discussed in the applicable areas of my testimony.

Q. What normalization adjustment was made to employee benefits expenses?

A. A normalization adjustment of ($19,000) as shown in HECO-1201, column (i), was made to adjust the expenses related to the renegotiation of the contract with the union upon the expiration of the current contract in 2007. This normalization adjustment is discussed later in my testimony.

ACCOUNT NO. 926000 – EMPLOYEE PENSIONS AND BENEFITS

Q. Please breakdown the adjusted test year expenses in account no. 926000 – employee pensions and benefits.

A. A breakdown of this account by category is as follows:

Category	Amount
Qualified Pension Plan	$ 18,029,000
Non-Qualified Pension Plan	$ 0
Other Postretirement Benefits	$ 7,465,000
Long-Term Disability Benefits	$ 514,000
Other Benefits/Administration	$ 776,000
Total Non-Labor	$ 26,784,000

Qualified Pension Plan

Q. What expenses are included in this category?

A. Expenses related to providing pension benefits to HECO's employees are included in this category.

Q. How does the Company provide pension benefits to its employees?

A. The Company provides pension benefits to its employees by participating in the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries ("HEI Retirement Plan"), a qualified defined benefit pension plan. Although assets of the HEI Retirement Plan are commingled for all participating employers, assets and liabilities of each participating employer are separated for purposes of determining each participating employer's pension costs. The amounts provided in this rate case are the portion that applies to HECO only.

The pension plan is an integral part of the Company's compensation package provided to employees, and is necessary to attract and retain quality employees engaged in the provision of electric service to the public.

Q. What is the pension expense for the test year?

A. The pension expense for the test year related to the qualified pension plan is $18,029,000 as shown in HECO-1201.

Q. What areas of the pension expense will you cover?

A. My testimony will describe the factors that affect pension expense and the components of the net periodic pension cost.

The accounting and ratemaking treatment of pension costs are discussed by Ms. Patsy Nanbu in HECO T-10.

Q. How is pension expense determined?

A. Watson Wyatt Worldwide, the plan's independent actuary, determines the pension expense to be recognized by the Company each year in accordance with the provisions of the Statement of Financial Accounting Standards No. 87 ("SFAS 87"). Under SFAS 87, the Company's pension cost is referred to as the net periodic pension cost ("NPPC").

Q. What is the NPPC?

A. This is the amount that HECO is required to recognize on its financial statements as the cost of providing pension benefits to its employees for the year, which includes the capitalized amount and the amount charged to expense.

Q. How was the 2007 test year estimate determined?

A. Watson Wyatt Worldwide calculated the 2007 test year estimated NPPC by using employee data as of January 1, 2006, and applying assumptions such as mortality, retirement and termination, and assumed salary/wage increases for one year to January 1, 2007. New participants were assumed to enter as of January 1, 2007. The actual NPPC for 2006 and estimated for 2007 are shown in HECO-1202.

Q. Why was the budget estimate for pension expense updated?

A. The budget estimate for pension expense was updated to reflect the revised estimate by Watson Wyatt Worldwide based on 1,462 employees. This was the year end number of employees projected by the Workforce Staffing and Development Division in September 2006. A more recent estimate of the number of employees at year end 2006 is 1,443 (see HECO-1403). The difference of 26 employees will not affect the pension cost significantly and the actual NPPC for 2007 will be determined by Watson Wyatt Worldwide based on actual employee and other data as of January 1, 2007.

Q. When will the actual 2007 NPPC be determined?

A. Watson Wyatt Worldwide will determine the actual 2007 NPPC in June 2007.

Q. Has the Commission used the NPPC in determining the Company's revenue requirements in prior cases?

A. Yes. Since the adoption of SFAS 87 in 1987, the Company has consistently and properly incorporated the NPPC in the forecast of employee benefits and the Commission accepted HECO's treatment of pension costs consistent with SFAS 87 in Decision and Order No. 11317 (Oct. 17, 1991) in Docket No. 6531, Decision and Order No. 11699 (June 30, 1992) in Docket No. 6998, Decision and Order No. 13704 (December 28, 1994) in Docket No. 7700 and Decision and Order No. 14412 (December 11, 1995) in Docket No. 7766. The parties in HECO's 2005 test year rate case, Docket No. 04-0113, accepted HECO's pension expense estimates which were based on the NPPC, determined in accordance with SFAS 87. See Stipulated Settlement Letter filed September 16, 2005 and HECO RT-15 in Docket No. 04-0113. The Commission also accepted the treatment of pension costs consistent with SFAS 87 in prior rate cases for HECO's affiliated companies, e.g., Decision and Order No. 18365, Docket No. 99-0207 HELCO's 2000 test year rate case, and Decision and Order No. 16922 (April 6, 1999), Docket No. 97-0346 MECO's 1999 test year rate case.

More recently, the Division of Consumer Advocacy stated the following in its December 8, 2006 Statement of Position in Docket No. 05-0310: "It should be made clear, however, that the Consumer Advocate does not object to the Commission confirming that the Companies can continue to recover its annual cost of providing pension benefits, as actuarially calculated under the provision of SFAS No. 87, with the clarification that the Consumer Advocate reserves the right to review the reasonableness of the pension expense included in the revenue requirement for future rate case proceedings."

Q. Is the NPPC the amount that HECO is required to contribute to fund its pension obligation?

A. No. The NPPC is the accrual cost that HECO needs to recognize for financial reporting purposes under SFAS 87. Minimum funding requirements for qualified pension plans are specified under the Employee Retirement Income Security Act of 1974 ("ERISA"), and maximum tax deductible amounts for federal income tax calculation purposes are specified by the Internal Revenue Code ("IRC"). HECO's minimum contribution funding requirement and maximum tax deductible contribution amounts are also calculated by Watson Wyatt Worldwide and provided in its actuarial valuation of the plan. The most recent valuation as of January 1, 2006, is provided in HECO-WP-1251.

Q. How does the Company fund the plan?

A. The Company funds the plan by making tax deductible contributions into a trust held by the plan's trustee, the Bank of New York. A pension investment committee ("PIC") is the named fiduciary for the plan and is responsible for overseeing the administration of the plan and management of plan assets.

Q. What contributions have been made to fund the plan?

A. Company contributions made to the pension trust since the adoption of SFAS 87 are shown in HECO-1203, line 8. The PIC's funding policy is to contribute amounts to the plan in accordance with the funding requirements of ERISA and the IRC. Within the minimum funding requirements of ERISA and the maximum deductible funding allowed under the IRC, the PIC considers the financial reporting of the plan. There are no specific regulations in financial reporting as to how a company should fund its pension plan. Generally, it has been the practice of the PIC to fund the NPPC; however, in 2003, 2004 and 2005, the PIC based its funding decision largely on the funded status of the plan. As previously noted, minimum funding requirements and maximum tax deductible amounts are determined by Watson Wyatt Worldwide.

Q. What accounts for fluctuations of the NPPC?

A. Fluctuations are primarily attributable to changes in the discount rate and asset return rate assumptions and the actual investment returns. Assumption changes affect the various components of the NPPC resulting in an increase or decrease. In general, a decrease in the discount rate assumption alone results in increased projected liabilities and higher pension costs, and an increase in the asset return rate assumption alone results in lower pension costs due to higher projected investment returns. If actual investment returns are greater than the assumption, a reduction in pension costs will result and if actual returns are lower than the assumption, pension costs will increase. The NPPC, primary assumptions and actual investment returns since 1987 are shown in HECO-1203.

a. <u>Factors Affecting Pension Expense</u>

Q. What factors determine the Company's pension expense?

A. In general, pension expense is determined by the requirements of SFAS 87 and the following factors:

1) plan provisions,
2) demographic characteristics of employees covered by the plan,
3) performance of the pension fund investments over time,
4) actuarial assumptions, and
5) methodology used to determine the value of plan assets.

1) <u>Plan Provisions</u>

Q. How do the provisions of the pension plan affect pension expense?

A. The provisions of the plan determine the amounts that the plan will have to pay to employees when they become eligible to retire.

Q. How are pension plan provisions determined?

A. Pension plan provisions for the members of the bargaining unit are negotiated between the Company and the International Brotherhood of Electrical Workers ("IBEW"), Local 1260. A different benefit formula applies to merit employees, but other plan provisions are the same as those for bargaining unit employees. The main provisions of the HEI Retirement Plan are summarized on pages 30-33 of HECO-WP-1251.

2) Employee Demographics

Q. How do employee demographics affect pension expense?

A. Pension benefits are determined by the employees' years of service, age at retirement, and wage levels or average salary levels at the time of retirement. The length of benefit payments depends on how long the employee lives, whether or not the employee has a surviving spouse at the time of death and how long the surviving spouse lives. Therefore, demographics such as hire dates, birthdates, pay rates, sex and marital status are used to determine benefit levels. The Company provides Watson Wyatt Worldwide with information about employees (age, sex, status, years of service, pay/salary rates) as of January 1 of each year which is used to determine the pension expense for that year.

3) Pension Fund Performance

Q. How does the performance of the pension fund affect the pension expense?

A. The Company is generally required to fund for each employee's benefit during the employee's career with HECO. The expected return on plan assets in the trust offsets the NPPC. As assets increase due to Company contributions and investment performance, the expected return will also increase and will reduce pension cost. The Company's contributions are accumulated in a trust from which retirement benefits are paid. The fund is invested by professional investment managers. The trustee provides investment information to Watson Wyatt Worldwide.

4) Actuarial Assumptions

Q. Why are actuarial assumptions needed to estimate pension expenses?

A. The Company's ultimate cost for the pension plan will not be known until all benefits are paid to all participants and beneficiaries. During the life of the plan, benefits payable are estimated using certain assumptions which take into account probabilities for determining how many and at what time participants will become eligible for benefits, the size of the benefits expected to be paid, how long benefits will be paid and the current value of future benefits. The assumptions, together with participant data and plan provisions determine the liability of the plan from which pension expense is determined.

Q. What are some of the assumptions used?

A. There are demographic assumptions such as turnover rates, mortality, retirement ages, the number of married participants and economic assumptions such as discount rates, asset return rates and salary increase rates.

Q. How are these assumptions determined?

A. These assumptions are determined by the Company in conjunction with Watson Wyatt Worldwide and approved by the Company's independent auditor. Generally, demographic assumptions are based on the plan's historical experience. The discount rate assumption is determined as required under SFAS 87 as a proxy for investment grade corporate bonds yield rates and the rate selected is approved by the Company's independent auditor.

5) Methodology for Determination of the Value of Plan Assets

Q. How is the value of plan assets determined?

A. The asset valuation method is selected by the Company in conjunction with Watson Wyatt Worldwide with the approval of the Company's independent auditor. Under the method used by HECO, the difference between the actual market value of assets and the expected market value of assets as of the valuation date is recognized over a five-year period – 0% in the first year and 25% in each of the next four years. The market value of assets as of the valuation date is adjusted for the unrecognized gains and losses from the prior four years to determine the market-related value of assets and the market-related value must be between 85% - 115% of the market value. As these gains and losses are recognized they are reflected in the market value and the accumulated gain/loss which is in the Amortization of Gain/(Loss) component of the NPPC.

b. Components of Pension Expense

Q. What are the components of the NPPC?

A. SFAS 87 specifies six basic components of NPPC. The actual amounts for 2005 and 2006 and estimated for 2007 as determined by Watson Wyatt Worldwide are as follows:

		2005 Actual	2006 Actual	2007 Estimated
1)	Service Cost	$16,641,629	$18,813,780	$18,168,000
2)	Interest Cost	$34,160,422	$35,149,890	$37,139,000
3)	Expected Return	($49,231,075)	($47,183,807)	($44,347,000)

		2005 Actual	2006 Actual	2007 Estimated
4)	Amortization of Transition Obligation	0	0	0
5)	Amortization of Prior Service Cost	($ 478,860)	($ 478,860)	($ 456,000)
6)	Amortization of (Gain)/Loss	$ 3,495,546	$ 7,935,663	$ 7,525,000
	Total NPPC	$ 4,587,662	$14,236,666	$18,029,000

1) Service Cost

Q. What is the "service cost" component?

A. The service cost is the "actuarial present value" of the pension benefits earned during the year (with projected pay).

Q. How was the service cost component for the test year determined?

A. The actuary used certain assumptions to estimate the amount of benefits that the Company will pay for an employee and determined the present value of these benefits (i.e., the service cost) assuming a discount rate of 6% for the test year.

2) Interest Cost

Q. What is the "interest cost"?

A. The interest cost component of the net periodic pension cost is the increase in the present value of the projected benefit obligation due to the passage of one year's time. The projected benefit obligation is an estimate of the pension benefits that will be paid assuming the continuation of the plan. Measuring the projected benefit obligation as a present value requires accrual of an interest cost at rates equal to the assumed discount rate.

3) Expected Return on Plan Assets

Q. How is the "expected return on plan assets" used in the computation of pension expense for the year?

A. The Company's overall pension costs are reduced by the earnings on the assets that have been acquired with contributions to the pension fund. The return on plan assets includes the plan's dividend and interest income for the year, plus realized and unrealized appreciation less any depreciation in the market value of its investments and the expenses related to benefits paid, administration and investing the fund.

The test year estimate was based on an 8.5% assumption for the expected return on plan assets. This rate is intended to reflect the average long term rate of earnings expected on investments in the pension fund.

4) <u>Amortization of Transition Obligation</u>

Q. What is the "amortization of transition obligation"?

A. This is the difference between the fair market value of plan assets and the actuarial present value of pension benefits earned at the time of transition to the provisions of SFAS 87. HECO's transition obligation has been fully amortized as of December 31, 2003.

5) <u>Amortization of Prior Service Cost</u>

Q. What is the "amortization of prior service cost"?

A. This is the amortization of a change in the projected benefit obligation due to a plan amendment. Under SFAS 87 increases or decreases in the projected benefit obligation due to a plan change should be amortized as a component of future pension costs over the average remaining service lives of active employees at the time of the amendment.

6) <u>Amortization of (Gain)/Loss</u>

Q. Please explain the amortization of gains and losses.

A. Gain and losses are changes in the amount of either the projected benefit obligation or the plan assets. These changes result from experience that is different from what is expected and from changes in assumptions.

If accumulated gains and losses are greater than a "corridor" amount, a portion is recognized in the current year (determined as the excess over the corridor amortized over the average remaining service lives of active employees expected to receive benefits under the plan).

Q. What accounts for the increase in the NPPC from 2005 to 2007?

A. Referring to section b "Components of Pension Expense" of this testimony, the actual NPPC increased by approximately $13,400,000 from 2005 to the estimated amount for 2007. The increase in the Service Cost and Interest Cost components of approximately $4,500,000 is mainly due to an increase in active participants and retirees as well as the effects of inflation. The Expected Return on Plan Assets component reduced by approximately $4,900,000 from 2005 to 2007 due mainly to the change in the asset return assumption from 9% to 8.5% and decrease in the market related value due to asset losses in prior years. For example, the returns on market value for 2001 and 2002 were -10% and -14% respectively compared to the assumption of 10%. The Amortization of Gain/Loss component increased by approximately $4,000,000 from 2005 to 2007 which is attributed to asset losses and losses from an increase in liabilities for active participants and retirees.

Q. Why were changes made to the asset return rate assumption?

A. The change in the asset return rate assumption is based on an analysis of the asset allocation and lower expected future returns on asset classes than previously projected. The actual assumptions for 2007 will be determined by the PIC in

January 2007, or shortly thereafter.

Non-Qualified Pensions

Q. What do the expenses for non-qualified pensions represent?

A. The Company participates in the HEI Retirement Plan for Non-Employee Directors, the HEI Excess Pay Supplemental Executive Retirement Plan ("Excess Pay SERP"), the HEI Excess Benefit Plan ("Excess Plan"), and the HEI Supplemental Executive Retirement Plan ("HEI SERP"). These non-qualified plans are described in the excerpt from the 2006 Proxy Statement attached as HECO-1204. Non-qualified benefits payable by the Excess Pay SERP and the Excess Plan arise for participants because their benefits are artificially restricted by IRS limits.

Q. What is the estimate for non-qualified pensions?

A. The estimate for non-qualified pensions is $340,000. This amount represents the expenses for pension benefits payable to certain executives, directors and other individuals.

Q. How were these expenses determined?

A. Watson Wyatt Worldwide determined these expenses using the same methodology that applies to the qualified pension plan in accordance with SFAS 87.

Q. How has HECO treated non-qualified pension expense for the test year?

A. In order to limit the issues in this proceeding, non-qualified pension expense has been deleted from the test year expenses, as shown in HECO-1201, column h. The 2007 test year estimate for non-qualified pension is $0. However, the Company's position is that pension benefits are earned by all employees under the provisions of the plan and earned benefits should not be treated differently for ratemaking purposes due to statutory limits. Therefore, the Company reserves the right to include non-qualified pension expense in its test year estimates in future rate cases.

Other Postretirement Benefits

Q. What expenses are included in the other postretirement benefits category?

A. Expenses related to providing postretirement benefits other than pensions to HECO's employees are included in this category.

Q. How does HECO provide postretirement benefits other than pensions to its employees?

A. HECO provides postretirement benefits other than pensions by participating in the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers ("HECO Postretirement Plan").

Q. Why was the budget estimate for postretirement benefits other than pensions adjusted?

A. The budget estimate was adjusted to incorporate the revised estimate from Watson Wyatt Worldwide based on 1,462 employees projected as of January 1, 2007 similar to the adjustment made for the pension expense.

Q. What is HECO's 2007 test year estimate for other postretirement benefits, after applicable adjustments?

A. The Company's test year 2007 estimate for other postretirement benefits after adjustment is $7,465,000 which includes the following:

Net periodic post retirement benefit cost	$7,395,000
Amortization of regulatory asset	1,302,000
Electric discount for retirees	(408,000)
Adjustment to delete life insurance for	

senior management	(824,000)
Total (HECO-1201, column j, line 3)	$ 7,465,000

Q. Please explain the reduction for the electric discount for retirees.

A. The budget includes a reduction to OPEB expenses of $408,000 which represents the estimate of the electric service discount provided to retirees. Since the electric discount is reflected in the test year in the form of lower revenues, this amount was deleted from the postretirement benefit cost estimate to avoid duplication.

Q. Please explain the $824,000 adjustment to delete life insurance for senior management.

A. The adjustment was made to delete postretirement costs related to life insurance for HECO's senior management personnel in order to simplify and limit the issues in this proceeding. These costs have been disallowed in prior cases. However, the Company reserves the right to propose inclusion of these expenses in its revenue requirement in future rate cases.

Q. How is the postretirement benefit expense for the test year determined?

A. Watson Wyatt Worldwide, the plan's actuary, determines the postretirement benefit expense to be recognized by the Company each year according to the provisions of the Statement of Financial Accounting Standards No. 106, Employers' Accounting for Postretirement Benefits Other Than Pensions ("SFAS 106"). The calculation of postretirement benefit expense under SFAS 106 is similar to the calculation of the NPPC under SFAS 87. Under SFAS 106, the Company's postretirement benefit cost is referred to as the net periodic postretirement benefit cost ("NPBC"). This is the amount that HECO must recognize on its financial statements as the cost of providing other postretirement benefits to its employees for the year which includes the capitalized amount and the amount charged to expense.

Q. When will the actual 2007 NPBC be determined?

A. The actual 2007 NPBC will be determined by Watson Wyatt Worldwide in June, 2007, based on employee data as of January 1, 2007.

Q. How has the Commission treated postretirement benefits costs for ratemaking purposes?

A. The Commission's Decision and Order No. 13659, (November 29, 1994), and letter, dated December 28, 1994, in Docket Nos. 7243 and 7233 (Consolidated) allowed HECO to adopt SFAS 106 in its entirety and to include in its rates the full cost of postretirement benefits other than pensions calculated pursuant to SFAS 106, effective January 1, 1995. In addition, the Commission allowed HECO to amortize the regulatory asset established for the deferral of postretirement benefit costs other than pensions for the period January 1, 1993 to December 31, 1994, over an 18-year period beginning January 1, 1995. The total amount being amortized is $23,400,000, or $1,302,000 per year.

Q. Does HECO fund the postretirement benefits?

A. Yes. As directed by the Commission in Decision and Order No. 13659, HECO funds the entire postretirement benefit costs to the maximum extent possible using tax advantaged funding vehicles.

Q. What are these funding vehicles?

A. In accordance with its funding plan submitted to the Commission on January 3, 1995, in Docket No. 7243, the Company makes contributions to trusts established to provide these benefits – two Voluntary Employees' Beneficiary Association ("VEBA") trusts (bargaining unit and non-bargaining). Additional contributions are also made to a special 401(h) account in the existing pension plan trust to provide postretirement medical benefits for non-bargaining employees. Although the assets of these trusts are commingled for all participating employers, assets and liabilities of each participating employer are separated for purposes of determining postretirement benefit expenses and funding amounts for each participating employer. Maximum tax deductible contributions to the various funding vehicles are determined by Watson Wyatt Worldwide and included in its actuarial valuation of the plan. A copy of the January 1, 2006, valuation of the HECO Postretirement Plan is provided in HECO-WP-1252.

Q. How are the contributions in the trusts invested?

A. Assets are held by the plan's trustee, the Bank of New York. The PIC is the named fiduciary for the management of the plan assets. The PIC uses professional money managers to manage the plan assets.

a. <u>Factors Affecting Postretirement Expense</u>

Q. What factors determine the Company's postretirement benefits expense?

A. In general, postretirement benefits expense is determined by the requirements of SFAS 106 and the factors used to determine the expense are similar to those that determine pension expense, and include the following:

1) plan provisions,
2) demographic characteristics of employees covered by the plan,
3) performance of the trust fund investments over time,
4) actuarial assumptions used in the calculations, and
5) methodology used to determine the value of plan assets

1) <u>Plan Provisions</u>

Q. What are the postretirement benefits that HECO provides to its retirees?

A. HECO provides the following postretirement benefits to retirees:

1) medical/drug insurance,
2) partial reimbursement of Medicare Part B premiums,
3) vision insurance,
4) dental insurance,
5) life insurance, and
6) electric service discount.

A summary of these benefits is provided in HECO-WP-1252, pages 22-26.

Q. How are postretirement benefits determined?

A. Benefits for bargaining unit employees are negotiated between the Company and the IBEW, Local 1260, and are included in the Benefit Agreement by and between Hawaiian Electric Company, Inc. and Local 1260 of the IBEW. The Benefit Agreement is provided at HECO-WP-1253. The electric discount is included in the Agreement between Hawaiian Electric Company, Inc. and Local 1260 of the IBEW. The page that includes the electric discount provision is provided at HECO-WP-1254. Merit employees are provided the same postretirement benefits provided to bargaining unit employees.

2) <u>Employee Demographics</u>

Q. How do employee demographics affect postretirement benefit expense?

A. Eligibility for postretirement benefits is determined by eligibility for pension benefits. The length of coverage depends on how long the employee lives and whether or not the employee has a spouse. Therefore, demographics such as hire dates, birthdates, and marital status are used to determine coverage. Watson Wyatt Worldwide uses the demographic information provided for the pension plan as of January 1 of each year to determine the postretirement benefit expense for that year.

3) Postretirement Fund Performance

Q. How does the performance of the postretirement investment funds affect postretirement benefit expense?

A. The Company is generally required to recognize the cost of each employee's postretirement benefits during the employee's career with HECO. The expected return on plan assets in the trust offsets the NPBC. As assets increase due to Company contributions and investment performance, the expected return will also increase and will reduce postretirement benefit expense. The Company makes contributions each year into the various funding vehicles previously mentioned to fund postretirement benefits when employees retire. The fund is invested by professional investment managers. The trustee provides investment information to Watson Wyatt Worldwide.

4) Actuarial Assumptions

Q. Are actuarial assumptions for determining the net periodic postretirement benefit expense the same as those used to determine the NPPC?

A. Yes, the assumptions are generally the same. However, an additional assumption for the medical trend rate is necessary for determining the net periodic postretirement benefit expense. The medical trend rate and other assumptions used to estimate the 2007 NPBC are included on pages 28-31 of HECO-WP-1252. Assumptions are determined by the Company in conjunction with Watson Wyatt Worldwide and approved by the Company's independent auditor.

Q. What is the assumption for the medical trend rate?

A. This assumption is an estimate of the annual rate of change in the cost of health care benefits. Under SFAS 106, the assumption should consider estimates of health care inflation, changes in health care utilization or delivery patterns, technological advances, and changes in the health care status of plan participants.

5) Method of Determination of the Value of Plan Assets

Q. How is the value of plan assets determined?

A. The asset valuation method is the same as that used for the pension plan.

b. Components of Other Postretirement Benefit Expense

Q. What are the components of the Company's NPBC?

A. The components for the NPBC are the same as for the NPPC as previously described. The actual amounts for 2005 and 2006 and estimated for 2007 as determined by Watson Wyatt Worldwide are as follows:

		2005 Actual	2006 Actual	2007 Estimated
1)	Service Cost	$ 3,584,416	$ 3,498,553	$ 3,430,000
2)	Interest Cost	$ 7,636,506	$ 7,298,164	$ 7,827,000
3)	Expected Return	($ 6,716,155)	($ 6,745,567)	($ 6,644,000)
4)	Amortization of Transition Obligation	$ 2,400,379	$ 2,400,379	$ 2,400,000
5)	Amortization of Prior Service Cost	$ 0	$ 0	$ 0
6)	Amortization of (Gains)/Loss	$ 128,541	$ 168,778	$ 382,000
	Total NPBC	$ 7,033,687	$ 6,620,307	$ 7,395,000

Q. Were changes made to the discount rate and asset return rate assumptions to estimate the NPBC for 2007?

A. Yes. The same discount rate and asset return rate assumptions for estimating the NPPC were used to estimate the NPBC.

Q. Has HECO made changes to reduce its postretirement benefit expense?

A. Yes. HECO significantly reduced postretirement benefit expense as a result of the 1998 negotiations with the IBEW by changing plan provisions and placing caps on future Company funded premiums. When premiums reach these caps, retirees are required to contribute the difference between the actual premium rates and the Company's caps in addition to the contributions required based on years of service. In addition, changes made to the medical and drug plans for active employees effective January 1, 2006, January 1, 2007, and January 1, 2008, also apply to retirees. These changes increase retirees' cost sharing for medical and drug costs (see HECO-WP-1253, pages 4-11).

Q. How has the Medicare Modernization Act ("MMA") affected HECO's postretirement benefits?

A. The Medicare Prescription Drug Improvement and Modernization Act of 2003 ("Act") expanded Medicare to include coverage for prescription drugs. Under the Act, employer-sponsored retiree drug plans that provide benefits equivalent to the new Medicare Part D drug coverage are eligible to receive a subsidy of 28 percent of the participants' drug costs between $250 and $5,000 per retiree, if the retiree waives coverage under Medicare Part D beginning in 2006. In 2005, Watson Wyatt Worldwide estimated that HECO's net periodic postretirement benefit expense would decrease by approximately $349,000, based on a 6% discount rate, due to the federal subsidy and the 2007 test year estimate of postretirement benefit expense reflects the provisions of the Act.

Q. How will SFAS 158 affect the NPPC and NPBC?

A. The Financial Accounting Standards Board ("FASB") recently issued SFAS 158, "Employer Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment to FASB Statement Nos. 87, 88, 106 and 132(R)", which includes changes in accounting for defined benefit pension and other postretirement plans. The amendments relate to the recognition of the funded status of pension and other postretirement benefit plans. SFAS 158 will not change the components or the determination of the NPPC and NPBC. The implications of SFAS 158 are explained in Docket No. 05-0310, Application of Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., Maui Electric Company, Limited, for Approval to Record a Regulatory Asset for Any Pension Liability Which Would Otherwise Be Charged to Accumulated Other Comprehensive Income, currently before the Commission.

Q. How will the Pension Protection Act affect the NPPC and NPBC?

A. The Pension Protection Act of 2006 ("Act"), which was enacted on August 18, 2006, makes significant changes to rules dealing with minimum funding, investments and tax qualification. The Act does not change the components or determination of the NPPC and NPBC. Minimum funding rules of the Act become effective in 2008.

Long-Term Disability Benefits

Q. What is the test year estimate of long-term disability benefit expenses after adjustments?

A. The test year 2007 estimate for this category of employee benefits expense is $514,000, as shown in HECO-1201.

Q. Why was the test year estimate adjusted?

A. The test year estimate was adjusted to reflect a change in the average number of employees. The budget was based on an average of 1,557 employees, which was updated to 1,548. The average number of covered employees for the test year is discussed by Ms. Faye Chiogioji in HECO T-14.

Q. What expenses are included in this category?

A. This category includes expenses with respect to providing long-term disability ("LTD") benefits to HECO's employees.

Q. Please describe LTD benefits.

A. LTD benefits are income replacement benefits provided to employees in the event of a non-occupational long-term disability that lasts beyond six months.

Q. How are LTD benefits provided to employees?

A. LTD benefits are provided through an insurance contract with MetLife. Effective January 1, 2003, benefits under the contract are paid on a fully insured basis. Prior to that, benefits were paid by the Company for the first five years of disability and on a fully insured basis thereafter.

Q. Why was the change made from a partially self-insured basis to a fully insured basis?

A. As explained in Docket No. 04-0113 (HECO's 2005 test year rate case), the decision to change to a fully insured basis was made primarily due to administrative issues. Under the partially self-insured contract between MetLife and HEI, there was only one bank account covering HEI as well as the utility companies making the tracking/reconciliation of claims paid by each company under the program extremely difficult due to timing differences. While partially self-insured arrangements were once prevalent, these arrangements are now the exception to MetLife's general administrative procedures. A fully insured arrangement with predictable costs was also a factor in making the change.

Q. How was the 2007 test year estimate calculated?

A. The calculation of long-term disability plan expenses is provided in HECO-1206. Since LTD premiums are based on employees' base pay, we used an average of annual salaries/wages as of September 1, 2006, multiplied by the average number of employees projected for the test year, and the 2007 premium rates to get $453,846. Estimated administrative services fees ("ASA") of $5,600 and estimated 2007 payments of $55,200 for claims still open from the partially self-insured portion prior to January 1, 2003, were added to the $453,846, to get $514,646.

Q. Why were LTD premiums calculated using salaries and wages as of September 1, 2006?

A. Salaries and wages as of September 1, 2006 were the latest available when estimates for the rate case were finalized. LTD monthly premiums for the test year will be based on actual salaries and wages.

Q. Why are the premium rates different for bargaining unit and merit employees?

A. The difference is due to the difference in the benefit. The LTD benefit for bargaining unit employees is 60% of base pay which is limited to the Prevailing Lineman Thereafter rate. The LTD benefit for merit employees is 65% of base pay. See HECO-1207 for 2007 premium rates.

Q. Does HECO provide other disability benefits to its employees?

A. Yes. In addition to LTD benefits, HECO provides other disability benefits such as workers' compensation and sick leave to employees.

Q. How do LTD benefits coordinate with other disability benefits?

A. The LTD plan is designed to provide a total level of disability income benefits to employees. Therefore, LTD benefits payable by the plan are offset by any other income received by the disabled employee from the Company. As such, if the employee is receiving sick leave or workers' compensation benefits, LTD benefits may be fully offset by these benefits.

Q. What is the reason for offsetting these benefits?

A. These benefits are offset because the plan is designed to encourage employees to return to work and keep disability related costs under control.

Other Benefits Administration

Q. What is HECO's test year estimate for the other benefits/administration category of employee benefit expenses charged to account no. 926000?

A. The 2007 test year estimate for Other Benefits/Administration (after adjustments) is $776,000 and includes the following:

1)	Training & Development	$230,000
2)	Bus Pass Program	$ 77,000
3)	Long Term Care Insurance	$ 31,000
4)	Integrated Absence Management Program	$ 74,000
5)	Misc. other benefits	$ 19,000
6)	HR Suite Amortization	$ 5,000
7)	Administration	$ 341,000
8)	On-Cost	($ 1,000)
	Total (HECO-1201, column j, line 5)	$776,000

Q. What adjustments were made to the expenses for other benefits/administration to arrive at HECO's test year estimate?

A. As shown in HECO-1201, column (h), line 5, a total adjustment of $364,000 was made in part to limit the issues in this proceeding, i.e., the Company deleted – ($602,000) for the executive life program based on a prior Commission ruling (D&O No. 14412, filed on December 11, 1995 in Docket No. 7766, HECO's 1995 test year rate case), $27,000 for the expenses related to 401(k) administration, and $177,000 for EICP, 401(k) and other non-recurring costs for HEI. However, the

Company reserves the right to propose inclusion of these expenses in future rate cases. A decrease of $34,000 was made to reflect the revision to the amortization amount for computer software development project costs for the portion of the HR Suite project expected to be completed in 2007. The HR Suite project is explained later in this testimony.

Q. Please explain the ($19,000) normalization amount in HECO-1201, column (i), line 5.

A. This amount reflects the normalization of estimated consulting costs for the negotiation of the Company's Benefit Agreement in 2007. The total estimated amount is $25,000 that is being normalized over four years which is based on the term of the last agreement.

Training and Development Programs

Q. What is the test year estimate for training and development costs?

A. The test year estimate of these costs is $230,000, which are related to training and development programs that are essential to HECO's ability to maintain a fully qualified workforce. The programs are administered by HECO's Workforce Staffing and Development and Industrial Relations departments.

Q. Describe the expenses related to the training and development programs.

A. The expenses relate to activities such as planning and determining employee development and training needs, development of in-house training programs, delivery of these programs, training materials, apprenticeship program costs and the voluntary educational assistance ("VEA") program.

Q. How was the test year estimate for training and development programs determined?

A. The test year estimate was determined by considering the courses to be offered, materials, instructor fees, and facilitator guides. Apprenticeship program costs were estimated using the training requirements of current apprentices, the estimated number of new apprentices, instructor fees, books and supplies. VEA program costs were based on 2005 actual costs increased by 10% (the average increase in tuition fees at local universities).

Q. Describe the types of in-house training programs covered in this account.

A. The in-house training programs provide specific job-related competencies or knowledge and/or career and life skills. Examples of program categories include customer relations, supervision, executive development and civil treatment (Equal Employment Opportunity).

Q. What is the voluntary educational assistance ("VEA") program?

A. This program was initiated to encourage employees to pursue educational programs outside of work hours that directly or indirectly enhance their performance on the job. HECO provides 100% reimbursement upon the successful completion of approved courses taken on the employees' own time. The courses must be offered by an accredited school, college, or university, or any agency or association approved by the Workforce Staffing & Development Department.

<u>Bus Pass Program</u>

Q. What is the test year estimate for this program?

A. The test year estimate for this program is $77,000.

Q. How was the test year estimate determined?

A. The estimate was based on the number of employees participating in the program and the cost of the bus pass.

Q. Please describe the program.

A. Under the program, employees are encouraged to use public transportation to commute to work by providing them with a bus pass. This alleviates traffic congestion, fuel consumption and parking accommodations.

<u>Long Term Care Insurance</u>

Q. Please describe this benefit.

A. Effective July 1, 2004, HECO provides merit employees with a basic level of long term care benefits through an insurance contract. In general the basic level provides a benefit of $1,000 per month for up to two years towards the cost of confinement in a long-term care facility. Employees also have the option to purchase additional coverage at their cost. Upon retirement or other termination of employment, employees may assume this cost to continue the coverage.

Q. What is HECO's cost for this benefit?

A. The annual premium for the basic level of coverage is estimated at $31,000, based on the current rate which is not anticipated to change for the test year.

<u>Integrated Absence Management Program</u>

Q. Please describe the type of expenses included in this category.

A. The expenses in this category are related to administration of the Integrated Absence Management ("IAM") program, the employee assistance ("EAP") program and other wellness activities.

Q. What is the test year estimate for IAM program costs?

A. The test year estimate is $74,000.

Q. How was the test year estimate for IAM program expenses determined?

A. This estimate is based on historical costs.

Q. What is the IAM program?

A. The IAM program was initiated in 2001 to better manage absences. Resources from workers' compensation, the Corporate Health Administrator and benefits are pooled to provide information on disability benefits and options to employees who incur an occupational or non-occupational disability. Under the program absences for occupational and non-occupational injuries and illnesses and family and medical leaves are managed with the goal of reducing the company's absence-related costs and providing disabled employees with integrated resources to access available benefits. Employees report daily absences to a centralized call center. These absences are reported to supervisors and to the Corporate Health Administrator who monitors employee absences and follows up with individual employees to address issues such as return to work and temporary work restrictions. Information is also provided to disabled employees to assist with claims processing for short and long term disabilities. The IAM group facilitates the Company's compliance with the Family and Medical Leave Act ("FMLA") and the Americans with Disabilities Act ("ADA").

Q. What is the EAP program?

A. The EAP provides employees with access to professional counselors for strictly confidential personal consultations on work-related, personal or mental health problems. Assessment for referral for substance abuse problems and resources to address legal or financial difficulties is also available. Immediate family members of employees are also eligible for these services.

Q. How does the Company benefit from EAP services?

A. Supervisors can make EAP referrals for employees about job performance or workplace behavioral concerns. Group sessions are provided for crisis intervention when critical events occur in the workplace. These services help employees to focus on their job and increase productivity by limiting distractions and undue emotional or psychological stress.

Q. How does HECO provide EAP services to its employees?

A. EAP services are provided through a contract with an external organization.

Miscellaneous Other Benefits

Q. Please describe the miscellaneous other benefits.

A. These benefits include costs related to the adoption reimbursement program, child care referral services, contributions in remembrance of deceased employees and retirees, cafeteria subsidy and deferred compensation.

Q. What is the test year 2007 estimate for these costs?

A. The test year estimate is $19,000 which was based on historical costs.

Human Resources Suite Project

Q. What is the Human Resources ("HR") Suite Project?

A. This is a planned computer software development project that involves the purchase and installation of a human resources suite system. The system will improve integration and functionality for human resources data and systems, specifically for benefits, human resources, compensation and disability management administration. An application was filed with the Commission (Docket No. 2006-0003) on January 3, 2006, on behalf of HECO, Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited, (the "Companies") requesting approval for the purchase and installation of Project P0001010, Human Resources Suite System, to defer certain computer software development costs, to apply an allowance for funds used during construction ("AFUDC") during the deferral period, to amortize the deferred costs (including AFUDC) over a twelve-year period and to include the unamortized deferred costs (including AFUDC) in rate base. This treatment is consistent with HECO's accounting policy for software development costs, as discussed by Ms. Nanbu in HECO T-10.

Q. What is the status of the application?

A. The Companies and the Consumer Advocate are currently in discussions for a possible settlement agreement in that proceeding. The Consumer Advocate indicated in its Statement of Position filed on May 26, 2006 that it does not object to the approval of the application. However, it had several concerns and recommended several conditions to address those concerns. The settlement agreement is expected to address those concerns. The application is currently pending with the Commission.

Q. How will the project be implemented?

A. The project will be implemented in two phases. Phase 1 will begin following approval by the Commission and includes the human resources and benefits functions, followed by Phase 2 which includes functions in areas such as employee self-service, compensation, leave management administration, recruitment and training.

Q. When are each of the phases expected to be completed?

A. At the time the budget was prepared, Phase 1 was expected to be completed and ready for use in December 2006. Phase1 is currently expected to be completed in November 2007. Phase 2 is expected to be completed in May 2008.

Q. What are total costs of the HR Suite project?

A. HECO's portion of total costs for the project for all years by cost type, phase and stage is in HECO-1218, page 1, and HECO's 2007 costs are shown on page 2. 2007 costs include amounts to be deferred of $2,358,000 (including $2,044,000 for Phase 1, and $314,000 for Phase 2), amounts to be expensed of $767,000 ($740,000 – not reengineering and $27,000 – reengineering), and $312,000 in capital costs. Please note that these are updated costs since the application was filed and will be submitted to update the application.

Q. How are the HR Suite costs being included in the 2007 test year estimates?

A. The capital costs are included as capital expenditures for the year. The expenses are charged to functional areas to which they relate and are included in account nos. 920, 921 and 926, as shown in HECO-1219. Phase 1 is now scheduled to be completed in November 2007, and the deferred costs are being amortized beginning in December 2007. The deferred costs are being amortized to account nos. 921, 925 and 926. The unamortized amount as of December 31, 2007 is included in rate base, as discussed by Ms. Gayle Ohashi, and shown in HECO-1017. Worksheets for the calculation of the amortized amount including AFUDC are in HECO-WP-1258.

Q. What are the HR Suite costs included in account no. 926 for the test year?

A. HR Suite costs are included in account nos. 926000 and 926010. The amount included in account no. 926000 for the HR Suite project for the test year is $5,000, which represents the amortization of the deferred costs (including AFUDC). Since implementation of the project has been delayed and Phase 1 is now scheduled to be completed in November 2007, the amortization is scheduled to begin in December, 2007, and the amount of the amortization in the budget was reduced by $34,000. Labor and non-labor expenses of $739,000 for consulting, software acquisition and maintenance and training are included in account no. 926010.

Administration

Q. What is included in administration costs?

A. These costs are related to expenses for administering the retirement plan including legal and consulting fees, inter-company charges from HEI for plan administration support, computer systems and departmental costs.

Q. What is the test year estimate for administrative costs?

A. The test year estimate is $341,000 which was determined based on prior year costs.

Variances

Q. Please explain the major variances in account no. 926000 costs where 2007 budgeted amounts differ from 2005 recorded amounts by 10% or more.

A. The major variances are explained in HECO-1208.

ACCOUNT NO. 926010-EMPLOYEE BENEFITS-FLEX CREDITS

Q. What expenses are included in account no. 926010?

A. This account includes expenses related to the Company's flexible benefits plan ("FlexPlan"), which consists of premiums for group medical, dental, vision and life insurance program and expenses related to administering these programs.

Q. Please breakdown the expenses in account no. 926010 – employee benefits-flex credits.

A. A breakdown of the expenses by category after adjustments is as follows:

Category	Amount
Flex Credits Less Prices	($1,446,000)
Group Medical Plan	8,460,000
Group Dental Plan	1,262,000
Group Vision Plan	199,000
Group Life Insurance Plan	1,238,000
Other/Administration	826,000
Total Non-Labor (HECO-1201), column j, line 15)	$10,539,000

Q. How does HECO provide group insurance benefits to its employees?

A. HECO provides group medical, dental, vision and life insurance benefits to its employees through a flexible benefits plan called "FlexPlan".

Q. What is the FlexPlan?

A. FlexPlan is a flexible benefit or cafeteria plan. The plan is designed to meet the requirements of Section 125 of the Internal Revenue Code ("IRC"). Under the provisions of the plan, employees are given an allocation of flex credits each year by the Company. These flex credits are stated in units of flex "dollars". Employees then apply these credits toward the purchase of non-taxable benefits (health and life insurance) by electing from several available plans, each with a stated flex price in units of flex "dollars". To the extent that the employee's flex credits exceed the total of flex prices for health and life insurance purchases, remaining credits can be 1) used to purchase other optional benefits such as supplemental life insurance, dependent life insurance, and accidental death and dismemberment insurance ("AD&D"), 2) directed to spending accounts for health benefits not covered by insurance and/or dependent care expenses, or 3) returned to the employee. If the total of flex prices for the plans elected by the employee exceeds flex credits, the difference is withheld from the employee's pay on a pre-tax basis. Information provided to employees regarding the FlexPlan is provided in HECO-WP-1250.

Q. Why did HECO adopt the FlexPlan?

A. The plan was adopted in 1989 to provide employees with the flexibility of choosing benefit levels that meet individual needs while helping the Company to control future medical plan costs.

Q. How does the FlexPlan help to control future health plan costs?

A. Health plan costs are driven by plan provisions, plan utilization and the costs of services. FlexPlan offers employees an incentive to waive health plan coverage in return for flex credits that can be used to purchase other benefits. For example, employees covered by a spouse's medical plan may elect to waive medical plan coverage with HECO and use their flex credits to purchase additional life insurance, dependent life insurance or put the credits into a spending account to apply towards non-covered medical or child care expenses. This results in lower utilization of medical plan benefits which results in lower premium rates.

Q. How is the Company's total cost for the FlexPlan determined?

A. The Company's cost is equal to:

Flex credits less Flex prices plus premiums (for all plans).

Flex Credits Less Prices

Q. What expenses are included in this category of employee benefit expenses?

A. This category includes the estimated difference between company-provided flex credits and flex prices for health and life insurance plans elected by employees.

Q. Why was the budget estimate adjusted?

A. The budget estimate was updated to reflect 1,548 as the projected average number of employees for the test year, instead of 1,557.

Q. How was the 2007 test year estimate determined?

A. The Company provides basic flex credits for health coverage plus additional credits for life insurance coverage. Basic flex credits amount to $67.54 per 24 pay periods for each employee. Life insurance credits are equal to the premium to provide each bargaining unit employee with coverage of one and one-half times the annual base pay, each merit employee with coverage of two times the annual salary, and senior management employees with coverage of $50,000.

The budget estimate for flex credits less prices shown in HECO-1209 was determined as follows:

1) The basic flex credit amount of $67.54 per employee per pay period was multiplied by 1,548, which is the estimated average number of covered employees for the test year and annualized to get $2,509,246 ($67.54 x 1,548 x 24 pay periods). This amount was added to the life insurance credit amount in (2) below.

2) The estimated credits for basic group life insurance were based on the September 1, 2006, average basic life credit per employee of $201 for bargaining unit employees and $262 for merit employees multiplied by 789 bargaining unit employees and 759 merit employees respectively, and then added together to get $357,447.

3) The sum of amounts from (1) and (2) above is $2,866,693 which was reduced by $4,312,329 total flex prices to get ($1,445,636). The total flex prices amount was estimated by applying the flex price for each plan to the associated projected number of employees for the test year based on the percentage of employees' elections from the January 1, 2006, enrollment.

Q. How is the level of flex credits and prices determined?

A. The difference between flex credits and prices is the employee contributions. The maximum amount of employee contributions towards the health plan is negotiated between the Company and the IBEW for bargaining unit employees. See Benefits Agreement at HECO-WP-1253. The same contribution level applies to merit employees. Flex credits and prices are set such that the difference between the employer-provided flex basic credits and flex prices for health plan options will not exceed the maximum employee contributions. Attached as HECO-1210 is a schedule showing basic flex credits of $67.54 per pay period for each employee and the prices for medical plan options. As an example, each employee receives $67.54 in basic flex credits each pay period. The employee elects the PPP medical plan (family coverage) at a price of $86.49, the vision plan (family coverage) at a price of $3.00, and the Major Care Dental plan (family coverage at a price of $6.05. Basic flex credits of $67.54 less flex prices of $95.54 ($86.49+$3.00+$6.05) equals $28.00, which is the employee's contribution as indicated in the Benefit Agreement for the test year at HECO-WP-1253, page 19. Employees also receive flex credits for life insurance. Basic credits and life insurance credits are added together and used towards purchasing all options under the FlexPlan. The basic flex credits have been at the same level since 1999, and the basic flex prices for health plan options have been revised annually as the maximum employee contribution amount increases.

Q. What does the test year estimate of ($1,446,000) indicate?

A. The negative amount indicates that flex prices of the options elected by employees for the test year will exceed the flex credits by $1,446,000, which is the estimate of the amount that will be deducted from employees' pay for the test year.

Group Medical/Dental/Vision Plans

Q. What do group medical/dental/vision plan expenses represent?

A. These expenses represent premiums for medical, dental and vision plans provided under the FlexPlan. HECO's test year 2007 estimates for these costs after adjustments are as follows: (See HECO-1201)

1)	Medical	$ 8,460,000
2)	Dental	$ 1,262,000
3)	Vision	$ 199,000

Medical plans are provided by the Hawaii Medical Service Association ("HMSA") and the Kaiser Foundation Health Plan ("Kaiser"). The dental and vision plans are provided by the Hawaii Dental Service ("HDS") and the Vision Service Plan ("VSP"), respectively.

Q. What plan options are included under FlexPlan?

A. The following health plan options are available under FlexPlan:

1) HMSA Preferred Provider Plan ("PPP") with Vision Plan,
2) HMSA Health Plan Hawaii Plus ("HPH") with Vision Plan,
3) Kaiser Permanente Group Plan with Vision Plan,
4) HDS Major Care Plan,
5) Waiver of Medical Coverage, and
6) Waiver of Dental Coverage.

Q. How were the budget estimates adjusted?

A. The budget estimates were updated to reflect 1,548 as the projected average number of employees for the test year, instead of 1,557.

Q. How were the budget estimates for medical, dental and vision plan premiums determined?

A. The estimate for each plan was determined by using the estimated average number of employees covered for the test year (1,548), multiplied by the applicable premium rate for 2007 for each plan. The estimated number of employees covered in each plan was determined by applying the relative percentages of employee plan elections for the January 1, 2006, enrollment, to the average number of employees for the test year. The premium calculation worksheets are provided in HECO-1211 (medical), HECO-1212 (dental), HECO-1213 (vision). Premium rates from the insurance companies are provided in HECO-1214 (medical), HECO-1215 (dental) and HECO -1216 (vision).

Q. What has HECO done to control the increase in medical plan premiums?

A. From 2002-2007, HECO's average increase in rates for medical plans ranged from 1%-5% per year depending upon the plan. (See HECO-WP-1255). As a result of the latest negotiations with the IBEW in 2003, medical plan provisions change effective January 1, 2005, January 1, 2006, January 1, 2007, and January 1, 2008. These changes will require increased out-of-pocket contributions by employees and result in reductions in premium rates. Medical plan rates effective January 1, 2007, are lower with these plan changes than they would have been without the changes.

Group Life Insurance

Q. What expenses are included in this category of employee benefit expenses?

A. This category includes premiums for group life (basic and supplemental coverage), dependent life and accidental death & dismemberment insurance coverages as elected by employees under the FlexPlan.

Q. What is the Company's test year 2007 estimate for group life insurance expenses after adjustments?

A. The test year estimate for group life insurance premiums after adjustments is $1,238,000.

Q. Why were the budget estimates adjusted?

A. The budget estimates were updated to reflect 1,548 as the projected average number of employees for the test year, instead of 1,557.

Q. How was the test year estimate calculated?

A. Since group life insurance coverage is a multiple of employees' annual base pay, we used the average annual salaries/wages as of September 1, 2006, multiplied by one and one-half for bargaining unit employees and two for merit employees to get the basic coverage which was then multiplied by the projected number of bargaining unit and merit employees and the annual premium rate effective January 1, 2007. Supplemental life, dependent life and accidental death & dismemberment premiums were estimated using employee elections as of January 1, 2006, assuming that the elections by employees in the test year would remain the same on a pro-rated basis. Premium rates for 2007 did not change from rates in effect for 2006. The test year estimate is calculated in HECO-1217.

Q. Why were group life insurance premiums for the test year calculated using wages and salaries as of September 1, 2006?

A. Group life insurance premiums for employees covered under the FlexPlan on January 1, 2007, will be based on wages and salaries as October 1, 2006. Wages and salaries as of September 1, 2006, were the latest available when estimates for the rate case were finalized.

Other/Administration

Q. What expenses are included in this category?

A. This category includes expenses of $826,000 related to FlexPlan including computer systems related and other administrative expenses, other group insurance premiums and expenses related to the HR Suite Project.

Q. What amounts are included in account no. 926010 in the test year for the HR Suite project?

A. Project costs included in account no. 926010 for the test year are $511,000. These expenses are attributable to consulting, software acquisition and maintenance and training. The HR Suite Project was described earlier in this testimony.

Variances

Q. Please explain the major variances in account no. 926010 where 2007 budget amounts differ from 2005 recorded amounts by 10% or more.

A. The major variances are explained in HECO-1208.

WAGE AND SALARY INCREASES

Bargaining Unit Wage Increase

Q. How were wage increases determined for bargaining unit positions for the test year?

A. Wage increases for bargaining unit positions are negotiated between the Company and the union. The current labor agreement expires on October 31, 2007. For purposes of the 2007 budget and the test year estimate, wages for bargaining unit positions were increased by 3.5% effective November 1, 2007. The percentage increase is reasonable based on industry experience and company position within its competitve market.

Merit Compensation Program

Q. How was the 2007 salary increase budget determined for merit positions?

A. The salary budget for merit positions is based on an assessment of HECO's competitive market, identification of HECO's position within this competitive market, market trends regarding future salary increases and an evaluation of internal "compression" with bargaining unit pay levels.

Q. How were merit salaries increased for the test year?

A. To estimate salaries for the test year, salaries as of April 30, 2007, were increased by 3.5% effective May 1, 2007, plus .25% effective September 1, 2007. Note, however, that individual salary increases within the approved budget are granted to employees based on performance, current salary position relative to peers, and current salary relative to comparable industry positions.

Q. How does HECO's budget of salary increase compare with the salary increase plans at other companies?

A. While it is not possible to precisely forecast 2007 salary increase amounts industry-wide due to the normal compensation survey timing and data delays, the 3.5% merit increase budget is in line with survey data currently available for 2007 projected salary increases. HECO uses survey data reflecting anticipated merit budget movements. Examples of survey data used are provided at HECO-WP-1256. In addition, the continuing increase in overall economic activity and low unemployment in Hawaii provide strong indications that 2007 industry-wide salary increases will at least match the 2006 salary increases.

Q. Who is HECO's competitive market?

A. HECO's competitive market includes mainland utilities, Pearl Harbor, engineering firms and other large diversified local companies.

Q. How is HECO positioned within its competitive market?

A. HECO's pay is above average, but below the targeted market position within the general utility industry. In some instances, particularly where HECO competes for very specialized skills or skills that are in high demand, the Company has been unable to hire its first or second choice candidates resulting in lengthy vacancies impacting business operations.

Q. Are HECO's pay levels reasonable when compared to the pay levels of similar positions of other local employers?

A. Yes. HECO's overall base pay reflects the unique nature of working for a regulated utility that provides services to nearly every resident on the island of Oahu. HECO's merit pay levels reflect the highly technical nature of the required engineering, operations and support positions and place a premium on hiring and retaining the best talent available.

Q. What are other forms of compensation?

A. Many companies are shifting more of their compensation increases into "at risk" programs whereby base salaries are increased at a conservative rate, while enabling employees to earn additional variable ("at risk") compensation depending on individual or business performance. This serves to restrain base salary increases and the associated benefits and tax-related costs, while providing employees an opportunity to maintain or increase their "total" compensation (base plus variable). HECO will be reviewing the compensation structure to consider new programs for merit employees subsequent to the test year.

Executive Compensation

Q. Does HECO have a different form of compensation for its executives?

A. Yes. On one hand, HECO's executive compensation is managed similarly to the non-executive merit employees, with salary ranges pegged to market salaries in the general utility industry. In addition, however, HECO has an Executive Incentive Compensation Plan ("EICP") and a Long-Term Incentive Plan ("LTIP") which places a portion of the executives' compensation "at risk".

Q. Describe the "at risk" component of HECO's executive compensation program.

A. Generally, 20%-50% of the executive's total compensation is dependent upon successful performance as determined through its EICP and LTIP. If certain objectives are not met, the executive does not receive his or her full competitive level of cash compensation.

Q. Has the cost with respect to this component of executive compensation been included in the test year?

A. No. While HECO's position is that EICP and LTIP costs are necessary business expenses that provide our executives with a competitive level of compensation, the Company has elected to limit the issues in this proceeding by excluding these costs from its test year revenue requirements. The Company reserves the right, however, to propose inclusion of such compensation in its revenue requirements in future rate cases.

<u>HO'OKINA AWARDS PROGRAM</u>

Q. What amount is included in the test year for the Ho'okina awards program?

A. $216,000 is included in various RA's for this program. See HECO-1220.

Q. Please describe the program.

A. The Ho'okina Awards Program was implemented in 2001 and is administered by the Industrial Relations Department. The program's objectives are to reward individual contributions and workplace behavior that support HECO's business objectives, and to promote corporate citizenship. Under this program, employees are eligible to receive cash awards upon meeting certain criteria related to behavior, safety, customer service and community service provided the Company's financial earnings goals are met. Information related to the program is provided in HECO-WP-1257.

Q. What amounts have been paid out to employees from this program?

A. Ho'okina awards for a year are approved by the Compensation Committee of the Board of Directors. Ho'okina awards are accrued during the year it is earned and are paid out in the following year. Payouts attributable to each year are as follows:

2001 $229,050
2002 $254,925
2003 $130,800

2004 $129,200
2005 $ 0
2006 $ 0

During 2005, HECO accrued Ho'okina expenses of $146,600, however, when the Compensation Committee did not approve the 2005 awards in 2006, the amounts accrued during 2005 were reversed.

Q. What is the reason for the zero payouts for 2005 and 2006?

A. Financial thresholds were not met in 2005 and the program was temporarily suspended in 2006 resulting from efforts to manage expenses. The program benefits ratepayers by encouraging greater participation by employees in community service activities such as education on energy conservation, greater productivity in the workplace and a commitment to working safely, customer service and adhering to company policies and standards of business conduct. HECO's intent is to continue the program.

Q. How was the estimate for the test year 2007 developed?

A. It was estimated that awards would equal $288,000 for 100% of employees qualifying. The estimate for the test year was based on 75% participation, or $216,000.

SUMMARY

Q. Please summarize HECO's 2007 test year expense for employee benefits.

A. HECO's 2007 test year estimates for employee benefits charged to O&M is $27,600,000, which include expenses for providing employee benefits to active employees and retirees. Benefits include pensions, other postretirement benefits, long-term disability, health plans, life insurance plans, and other miscellaneous benefits. Benefits are negotiated with the IBEW for bargaining unit employees.

Merit employees generally receive the same level of benefits but with differences in retirement benefits, group life insurance and long term care. Costs are driven by three major items – pension benefits, other postretirement benefits, and medical premiums. Pension and postretirement benefits expenses were calculated by HECO's actuary using reasonable assumptions in accordance with the provisions of SFAS 87 and SFAS 106, which have been accepted by the Commission for ratemaking purposes in prior rate cases. Pension and postretirement benefit expenses have varied in the past due largely to varying actual investment returns and changes in assumptions. HECO has consistently negotiated revisions to medical plans to manage company costs. Estimates for other benefits have been made using reasonable assumptions and the most recent data available at the time the estimates were developed.

Q. Why is HECO's total compensation package a necessary business expense?

A. HECO's mission is to provide reliable electrical service to its customers. While HECO's power plants and equipment are necessary assets, the mission cannot be accomplished without HECO's employees. Employee benefits and wages are essential to HECO's ability to attract and retain a highly qualified workforce. Retention of such a workforce is critical to HECO's ability to fulfill its mission. Wages and benefits are negotiated with the union and management has been successful in negotiating changes that help to manage costs. Merit increases are in line with the market.

Q. Does this conclude your testimony?

A. Yes, it does.

HAWAIIAN ELECTRIC COMPANY, INC.

JULIE K. PRICE

EDUCATIONAL BACKGROUND AND EXPERIENCE

Business Address:	Hawaiian Electric Company, Inc. 220 South King Street Honolulu, Hawaii 96813
Current Position:	Manager, Compensation & Benefits
Prior Positions:	1970 – 1989 Manager, Employee Benefits Administrator, Employee Benefits Secretary, Employee Benefits Dillingham Construction Corporation Pleasanton, CA Dillingham Corporation Honolulu, HI
Professional Registration:	Certified Employee Benefits Specialist CEBS, The Wharton School, University of Pennsylvania. Fellow, International Society of Certified Employee Benefits Specialist.
Years of Service:	17
Previous Testimony:	Docket Nos. 7243 and 7233 (Consolidated) - Postretirement Benefits Other Than Pensions-Costs related to these benefits and efforts to control these costs. Docket Nos. 7700, 7766, 04-0113 – HECO; A&G Expenses-Employee Benefits. Docket Nos. 96-0040, 97-0346, – MECO; A&G Expenses-Employee Benefits. Docket Nos. 94-0140, 99-0207, 05-0315 – HELCO; A&G Expenses-Employee Benefits.

HAWAIIAN ELECTRIC COMPANY, INC.
ADMINISTRATIVE AND GENERAL EXPENSES - Employee Benefits
($1000s)

Line	Account Description	(a) Recorded 2001	(b) 2002	(c) 2003	(d) 2004	(e) 2005	(f) Budget 2006	(g) 2007	(h) Adj	(i) Normalizations	(j) TY Est. 2007
	926000 Employee Pensions and Benefits										
1	Qualified Pension Plan	-20,465	-15,655	5,894	-1,547	4,588	14,133	17,802	227 [1]		18,029
2	Non-Qualified Pension Plans	206	229	355	474	336	413	340	-340 [2]		0
3	Other Postretirement Benefits	3,409	5,565	8,208	7,535	8,336	8,499	8,170	-705 [1,2]		7,465
4	Long-Term Disability Benefits	262	300	498	509	532	564	517	-3 [1]		514
5	Other Benefits/Administration	214	-190	-252	-128	160	298	431	364 [1,2]	-19 [3]	776
6	Subtotals: Non-Labor	-16,374	-9,751	14,703	6,843	13,952	23,907	27,260	-457	-19	26,784
7	Labor	435	363	496	555	580	499	604	0		604
8	Total 926000	-15,939	-9,388	15,199	7,398	14,532	24,406	27,864	-457	-19	27,388
	926010 Employee Benefits-Flex Credits										
9	Flex Credits Less Prices	-612	-670	-744	-829	-841	-1,409	-1,453	7 [1]		-1,446
10	Group Medical Plan	5,245	6,245	6,097	7,005	7,543	7,867	8,511	-51 [1]		8,460
11	Group Dental Plan	919	941	957	977	1,124	1,262	1,269	-7 [1]		1,262
12	Group Vision Plan	200	198	192	192	170	193	200	-1 [1]		199
13	Group Life Insurance Plan	615	636	389	693	824	1,284	1,244	-6 [1]		1,238
14	Other/Administration	253	133	87	135	192	468	630	196 [1]		826
15	Subtotals: Non-Labor	6,620	7,483	6,978	8,173	9,012	9,665	10,401	138	0	10,539
16	Labor	58	67	66	71	69	289	283	-103 [1]		180
17	Total 926010	6,678	7,550	7,044	8,244	9,081	9,954	10,684	35	0	10,719
18	926020 Employee Benefits Transfer	2,511	697	-6,543	-4,446	-6,783	-9,875	-10,636	165		-10,471
19	Grand Total Charged to O&M	-6,750	-1,141	15,700	11,196	16,830	24,485	27,912	-257	-19	27,636

[1] Updated estimates
[2] Deleted to limit issues
[3] Normalized consulting costs for negotiations

Line 3: 119 Other postretirement benefits updated for 1,462 employees
-824 Executive life deleted to limit issues
Line 5: -34 HR Suite amortization update
602 Executive life deleted to limit issues
-27 401(k) administration deleted to limit issues
-177 HEI EICP, 401(k) administration, other non-recurring costs deleted to limit issues
Line 14: HR Suite update:
-55 Reduced software maintenance due to project delay
179 Increased consulting, training, additional software
72 Increased software on-cost
Line 16: HR Suite update

Source: Cols a-g, Lines 6-8, 15-18 - HECO-WP-101(D), pgs 465-475

2006 NPPC - Components

5.75% Discount Rate
9.0% Asset Return Assumption

Pension	**2006 NPPC**
	HECO
Service Cost	18,813,780
Interest Cost	35,149,890
Exp Asset Return	(47,183,807)
Amort of Tr Oblig	0
Amort of Pr Svc Cost	(478,860)
Amort of (Gain)/Loss	7,935,663
Total	14,236,666

INFORMATION FOR COMPANIES OTHER THAN HECO DELETED

2007 Estimated NPPC - Components

Pension	2007 Estimated NPPC

HECO

6.0% Discount Rate, 8.5% Asset Return Assumption

Service Cost	18,168,000
Interest Cost	37,139,000
Exp Asset Return	(44,347,000)
Amort of Tr Oblig	0
Amort of Pr Svc Cost	(456,000)
Amort of (Gain)/Loss	7,525,000
Total	18,029,000

INFORMATION ON COMPANIES OTHER THAN HECO HAS BEEN DELETED

Hawaiian Electric Company, Inc.
Pension & OPEB Costs
1987-2007

Line		(a) 1987 Actual	(b) 1988 Actual	(c) 1989 Actual	(d) 1990 Actual	(e) 1991 Actual	(f) 1992 Actual	(g) 1993 Actual	(h) 1994 Actual	(i) 1995 Actual	(j) 1996 Actual
1	Qualified Plan	9,216,777	8,307,882	9,007,061	9,739,662	10,617,695	11,382,007	10,939,516	10,924,690	6,408,000	8,380,584
2	Non-Qualified Plans [2]	145,541	334,671	198,260	294,658	175,451	103,410	184,174	243,032	299,652	369,814
3	Total	9,362,318	8,642,553	9,205,321	10,034,320	10,793,146	11,485,417	11,123,690	11,167,722	6,707,652	8,750,398
4	OPEB - FAS 106	NA	NA	NA	NA	NA	NA	NA	NA	15,724,612	14,935,627
5	OPEB - Reg Asset Amort [1]									2,751,001	1,301,839
6	Total	NA	NA	NA	NA	NA	NA	NA	NA	18,475,613	16,237,466
7	OPEB - Executive Life Only [3]	NA	NA	NA	NA	NA	NA	NA	NA	609,327	657,180
	Assumptions:										
	Discount Rate	7.50%	8.00%	8.50%	8.50%	8.50%	8.50%	8.50%	7.00%	8.00%	7.00%
	Asset Return Rate	7.50%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	9.00%	9.00%
	Medical Trend	NA	NA	NA	NA	NA	NA	NA	NA	7.50%	6.50%
	Dental Trend	NA	NA	NA	NA	NA	NA	NA	NA	6.00%	5.00%
	Vision Trend	NA	NA	NA	NA	NA	NA	NA	NA	5.00%	4.00%
	Actual Returns for Valuation	13.15%	0.58%	9.35%	0.78%	13.48%	23.51%	11.62%	11.27%	8.96%	11.27%
	Market Related Value Return	3.17%	4.34%	6.32%	3.42%	8.81%	12.06%	27.58%	10.49%	7.60%	13.06%
	Market Value Return	0.55%	6.89%	22.00%	-1.67%	25.93%	4.20%	16.16%	-2.77%	26.47%	13.92%
8	Contrib.To Pension Trust	8,736,278	8,307,882	9,007,061	9,739,662	10,617,695	11,382,007	10,939,516	10,924,690	9,058,124	6,971,824
9	Contrib.To OPEB Trusts	NA	NA	NA	NA	NA	NA	NA	NA	14,270,149	15,580,286

[1] Regulatory asset amortization began in January 1995
[2] Non-qualified plan expenses removed from test year estimate
[3] Executive Life expenses removed from test year estimate

Hawaiian Electric Company, Inc.
Pension & OPEB Costs
1987-2007

Line		(k) 1997 Actual	(l) 1998 Actual	(m) 1999 Actual	(n) 2000 Actual	(o) 2001 Actual	(p) 2002 Actual	(q) 2003 Actual	(r) 2004 Actual	(s) 2005 Actual	(t) 2006 Actual	(u) 2007 TY Est.
1	Qualified Plan	7,117,179	1,870,595	(1,073,259)	(19,322,692)	(20,465,117)	(15,655,436)	5,894,495	(1,546,921)	4,587,662	14,236,666	18,029,000
2	Non-Qualified Plans [2]	607,686	357,662	319,919	296,534	206,237	228,915	354,937	474,310	335,962	333,313	340,000
3	Total	7,724,865	2,228,257	(753,340)	(19,026,158)	(20,258,880)	(15,426,521)	6,249,432	(1,072,611)	4,923,624	14,569,979	18,369,000
4	OPEB - FAS 106	14,393,350	9,284,785	3,574,126	1,761,196	2,106,966	4,262,731	6,905,766	6,233,487	7,033,687	6,620,307	7,395,000
5	OPEB - Reg Asset Amort [1]	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839
6	Total	15,695,189	10,586,624	4,875,965	3,063,035	3,408,805	5,564,570	8,207,605	7,535,326	8,335,526	7,922,146	8,696,839
7	OPEB - Executive Life Only [3]	671,152	540,422	518,685	458,422	551,450	637,414	844,050	855,395	900,225	862,439	824,000
	Assumptions:											
	Discount Rate	7.00%	7.00%	6.50%	7.75%	7.50%	7.25%	6.75%	6.25%	6.00%	5.75%	6.00%
	Asset Return Rate	9.00%	10.00%	10.00%	10.00%	10.00%	10.00%	9.00%	9.00%	9.00%	9.00%	8.50%
	Medical Trend	6.50%	5.50%	5.00%	6.25%	6.00%	10%-4.75%	9.25%-4.25%	10%-4.25%	10%-5%	10%-5%	10%-5%
	Dental Trend	5.00%	4.00%	3.50%	4.75%	4.50%	4.75%	4.25%	4.25%	5.00%	5.00%	5.00%
	Vision Trend	4.00%	3.50%	3.00%	4.25%	4.00%	3.75%	3.25%	3.25%	4.00%	4.00%	4.00%
	Actual Returns for Valuation	13.49%	15.03%	25.19%	15.03%	13.45%	-14.69%	2.29%	8.67%	8.68%	Available	
	Market Related Value Return	14.09%	15.23%	28.31%	11.85%	5.04%	-14.52%	22.89%	2.58%	0.69%	in	
	Market Value Return	15.23%	16.38%	30.10%	-3.32%	-10.26%	-13.90%	23.30%	10.13%	7.38%	June, 2007	
8	Contrib.To Pension Trust	5,876,355	2,206,034	0	0	0	0	13,394,248	15,186,494	6,000,000	0	0
9	Contrib.To OPEB Trusts	15,024,037	10,046,203	4,357,280	2,604,613	2,857,355	4,927,156	7,363,555	6,679,931	7,435,301	7,059,707	7,872,839

[1] Regulatory asset amortization began in January 1995
[2] Non-qualified plan expenses removed from test year estimate
[3] Executive Life expenses removed from test year estimate

Pension Plans

All regular employees (including the Named Executive Officers) are covered by noncontributory, qualified defined benefit pension plans. The plans provide retirement benefits at normal retirement (age 65), reduced early retirement benefits and death benefits. The Named Executive Officers except Ms. Lau participate in the Retirement Plan for Employees of HEI and Participating Subsidiaries ("HEI Plan"). Ms. Lau participated in the HEI Plan while employed by HECO and HEI and is currently a participant in the American Savings Bank Retirement Plan ("ASB Plan"). Mr. Clarke and Mr. May also participate in the HEI Supplemental Executive Retirement Plan ("HEI SERP") and Ms. Lau also participates in the ASB Supplemental Retirement, Disability, and Death Benefit Plan ("ASB SERP") (see pages 27 and 28).

In December 2005 Mr. Yeaman was added as a participant to the HEI SERP effective April 1, 2006 or such later date when the plan is formally amended to comply with the requirements of IRC Section 409A.

Some of the Named Executive Officers are affected by Internal Revenue Code ("IRC") limitations on qualified plan benefits. They are, therefore, also covered under the HEI Excess Benefit Plan ("Excess Plan") and the HEI Excess Pay Supplemental Executive Retirement Plan ("Excess Pay SERP"), which are noncontributory, nonqualified plans.

The following table shows estimated annual pension benefits payable at retirement under the HEI Plan, Excess Plan and Excess Pay SERP based on base salary that is covered under the three plans and years of service with the Company and other participating subsidiaries.

PENSION PLAN TABLE

Remuneration	Years of Service						
	5	10	15	20	25	30	35
$250,000	25,500	51,000	76,500	102,000	127,500	153,000	167,500
300,000	30,600	61,200	91,800	122,400	153,000	183,600	201,000
350,000	35,700	71,400	107,100	142,800	178,500	214,200	234,500
400,000	40,800	81,600	122,400	163,200	204,000	244,800	268,000
450,000	45,900	91,800	137,700	183,600	229,500	275,400	301,500
500,000	51,000	102,000	153,000	204,000	255,000	306,000	335,000
550,000	56,100	112,200	168,300	224,400	280,500	336,600	368,500
600,000	61,200	122,400	183,600	244,800	306,000	367,200	402,000
650,000	66,300	132,600	198,900	265,200	331,500	397,800	435,500
700,000	71,400	142,800	214,200	285,600	357,000	428,400	469,000
750,000	76,500	153,000	229,500	306,000	382,500	459,000	502,500
800,000	81,600	163,200	244,800	326,400	408,000	489,600	536,000

The HEI Plan provides a monthly retirement pension for life. Benefits are determined by multiplying years of credited service and 2.04% (not to exceed 67%) times the participant's Final Average Compensation (average base salary as shown for the Named Executive Officers in the Summary Compensation Table for any consecutive 36 months out of the last 10 years that produces the highest monthly average) without any offset for social security. As of December 31, 2005, the Named Executive Officers had the following number of years of credited service under the HEI Plan: Mr. Clarke, 18 years; Mr. May, 13 years; Ms. Lau, 15 years; Mr. Yeaman, 3 years; and Ms. Wong, 15 years.

Benefits under the ASB Plan are determined by multiplying years of credited service (not to exceed 35 years) and 1.5% times the participant's Final Average Compensation (average compensation as shown for Ms. Lau in the Summary Compensation Table for the highest five of the last ten years of credited service) without any offset for social security. As of December 31, 2005, Ms. Lau had six years of credited service under the ASB Plan.

Section 415 of the IRC limits the retirement benefit that a participant can receive from qualified retirement plans such as the HEI Plan and ASB Plan. The limit for 2005 was $170,000 ($175,000 for 2006) per year at age 65. The Company adopted the Excess Plan to provide benefits that cannot be paid from the qualified plans due to this maximum limit, based on the same formula as the qualified plans.

IRC Section 401(a)(17) limits a participant's compensation that can be recognized under qualified retirement plans. The limit on the maximum compensation for 2005 under IRC Section 401(a)(17) was $210,000 ($220,000 for 2006). The Company adopted the Excess Pay SERP to provide benefits that cannot be paid from the qualified plans due to the maximum compensation limit under IRC Section 401(a)(17), based on the same formula as the qualified plans.

The Company also maintains two supplemental executive retirement plans ("HEI SERP" and "ASB SERP") for certain executive officers. Mr. Clarke and Mr. May participate in the HEI SERP and Ms. Lau participates in the ASB SERP. Mr. Yeaman will participate in the HEI SERP effective the later of April 1, 2006 or the date the plan is amended for IRC Section 409A. Benefits under the HEI SERP and ASB SERP are in addition to qualified retirement benefits payable from the HEI Plan, the ASB Plan and Social Security.

Under the HEI SERP, the executive is eligible to receive, at age 60, a benefit of up to 60% (depending on years of credited service) of the participant's average compensation, which includes amounts received under the annual EICP in the highest three out of the last five years of service. The benefit payable under the HEI SERP is reduced by the participant's primary Social Security benefit and the benefit payable from the HEI Plan, but in no event is it less than the benefit that would be payable under the HEI Plan before any IRC Sections 415 and 401(a)(17) reductions. The HEI SERP provides for reduced early retirement benefits at age 50 with 15 years of service or age 55 with five years of service, and survivor benefits in the form of an annuity in the event of the participant's death after becoming eligible for early retirement. Based on Mr. Clarke's announced retirement date of May 31, 2006, the overall total retirement benefits payable to Mr. Clarke in the form of a straight life annuity at age 63 is $603,011, based on his current compensation level ($92,608 from the HEI Plan, $510,403 from the HEI SERP, and no amount owing from the Excess Pay SERP or the Excess Plan). The overall benefits payable to Mr. May in the form of a straight life annuity projected to age 65 is $288,226, based on his current compensation level ($86,137 from the HEI Plan, $65,288 attributed to the HEI SERP, $136,801 calculated under the Excess Pay SERP and no amount owing from the Excess Plan).

The ASB SERP provides a benefit at age 65 of up to 60% (depending upon years of service) of the participant's average compensation (including 50% of the amounts received under the annual EICP) in the highest five consecutive years out of the last ten years of service, reduced by the participant's primary Social Security benefit and the benefit payable from the ASB and HEI Plans, but in no event is it less than the benefit that would be payable under the ASB Plan before any IRC Sections 415 and 401(a)(17) reductions. The ASB SERP also provides for termination and survivor benefits in certain circumstances. The overall total retirement benefits payable to Ms. Lau in the form of a straight life annuity projected to age 65 is $530,573, based on her current compensation level

($54,600 from the ASB Plan, $64,974 from the HEI Plan, $410,999 calculated under the HEI Excess Pay SERP and no amounts owing under the Excess Plan or the ASB SERP).

2006 NPBC - Components

5.75% Discount Rate
9.0% Asset Return Assumption

OPEB	2006 Net Periodic Postretirement Benefit Cost	
	Total	**Exec Life ONLY**
	HECO	**HECO**
Service Cost	3,498,553	83,093
Interest Cost	7,298,164	436,201
Exp Asset Return	(6,745,567)	0
Amort of Tr Oblig	2,400,379	343,145
Amort of Pr Svc Cost	0	0
Amort of (Gain)/Loss	168,778	0
Total	6,620,307	862,439

INFORMATION FOR COMPANIES OTHER THAN HECO DELETED

2007 Estimated NPBC - Components

OPEB	2007 Estimated NPBC	
	Total	Exec Life ONLY
	HECO	HECO
6.0% Discount Rate, 8.5% Asset Return Assumption		
Service Cost	3,430,000	47,000
Interest Cost	7,827,000	434,000
Exp Asset Return	(6,644,000)	0
Amort of Tr Oblig	2,400,000	343,000
Amort of Pr Svc Cost	0	0
Amort of (Gain)/Loss	382,000	0
Total	7,395,000	824,000

INFORMATION ON COMPANIES OTHER THAN HECO HAS BEEN DELETED

Hawaiian Electric Co., Inc.

CALCULATION OF LONG TERM DISABILITY

2007

					MERIT		BU	TOTAL
Average Salary for	January	2007	Enrollment		76,598		59,872	
				x	1.0000			
					76,598			
Salary/Wage Adjustment		*(see note)*		x	1.0000	x	1.0000	
					76,598		59,872	
Projected No. of Merit and BU Employees				x	759	x	789	
Projected Compensation for	2007				58,137,882		47,239,008	
2007	Premium rate	**BU**	$0.37					
	per $100 Compensation	**MERIT**	$0.48	x	$0.0048	x	$0.0037	
					$279,061.83		$174,784	453,846
				ASA admin fee plus banking fees			+	5,600
				Annual Premium				459,446
Plus Claims	(incurred as of	06/30/06	& annualized)				+	55,200
						2007	Forecast	514,646

780 PHE NE NPFZZZZZ 509 **514,646**

No. of Merit Employees	49%
No. of BU Employees	51%

AON

Employee Benefits Consulting

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August 29, 2006

Mr. John Panosh
Account Executive
MetLife
4380 SW Macadam Avenue, Suite 200
Portland, OR 97201

RE: HAWAIIAN ELECTRIC INDUSTRIES – PROPOSAL ACCEPTANCE FOR 2007

Dear John:

We are pleased to inform you of Hawaiian Electric Industries, Inc.'s decision to accept MetLife's proposal, which would essentially break open HEI's existing 2-year agreement. HEI has agreed to accept MetLife's proposal of an overall -6.0% decrease, effective January 1, 2007, guaranteed for two years. The accepted rates are as follows:

Non-Bargaining Employees:	$.48 per $100 of covered wages
Bargaining Employees:	$.37 per $100 of covered wages

The next scheduled renewal as January 1, 2009.

Additionally, please advise what is needed to begin tracking the experience (premiums and claims) separately between the Non-Bargaining and Bargaining employees. This information will help ensure rates applied to each group is appropriate based on each group's specific experience. While we understand both employee groups are combined for total case underwriting, future renewal rates for each group should be weighted based on each group's experience.

We appreciate the steps MetLife has taken in evaluating and modifying rating components for a more appropriate and fair rate position that is beneficial to our mutual client.

Please feel free to contact me should you have any questions.

Sincerely,

Lorraine P. Nakasone

Lorraine P. Nakasone
Consultant

RECEIVED
AUG 30 2006
By

cc: Debi Rodriquez/MetLife
Myra O'Brien, Julie Price and Phyllis Hanta/ HEI
Malcolm Tajiri/Aon Consulting

HAWAIIAN ELECTRIC COMPANY, INC.

ADMINISTRATIVE AND GENERAL EXPENSES
Employee Benefits
Increase/Decrease by Activity equal to or greater than $200,000 and 10%

Line		Exp. Code [1]	(a) 2005 Recorded	(b) 2007 Budget	(c) Inc/-Dec	(d) % Inc/Dec	Explanation
	926000 Employee Pensions and Benefits						
1	Act 779 Administer Retirement Programs	509	11,957,311	25,418,000	13,460,689	113	Increase in pension plan expenses based on SFAS 87 due to change in asset return assumption and amortization of gain/loss. See HECO T-12
2	Act 780 Adm Benefit Plans, Policies & Procedures Other Than Flex and Retirement	501	-166,431	87,961	254,392	-153	2005 includes employee-paid premiums for long term care insurance of -$232,144, with total premium recorded in expense code 509. Increases in wellness expenses.
3		509	284,585	-108,201	-392,786	-138	2005 includes total premiums for long term care insurance of $267,658, while 2007 amount of $31,200 is net of employee-paid premiums. Increase in LTD premiums and fees offset by decrease in executive life expenses and business travel accident premiums (paid in 2005 for two year period).
	926010 Employee Benefits - Flex Credits						
4	Act 778 Administer Flexible Benefits Program	509	9,671,233	11,423,201	1,751,968	18	Premium increase for group insurance benefits
5		900	-849,778	-1,452,979	-603,201	71	Increase in employee contributions
6	PFB778PHENEP0001010501	501	0	249,136	249,136		New HR Suite project costs

[1] Expense Code
501 Outside Services - General
509 Outside Services - Specific Use
900 Financial Statement Items

Hawaiian Electric Co., Inc.

Projected FlexPlan & Premium Expense

2007

CREDITS		PRICES		Enrollment as of Jan-06	Emp No.	Amount			CR - PR
Basic	2,509,246								
Life	357,447								
Total	2,866,693								
	778 PHE NE PNFZZZZZ 900								
		PPP	Single	9.0%	139.3	226,268			
			S. Parent	2.2%	34.1	59,326			
			Couple	8.0%	123.8	239,063			
			Family	20.9%	323.5	671,508			
		HPH Plus	Single	11.3%	174.9	284,094			
			S. Parent	3.5%	54.2	94,295			
			Couple	6.6%	102.2	197,352			
			Family	19.6%	303.4	629,786			
		SUBTOTAL HMSA				***2,401,692***			
		Kaiser	Single	3.8%	58.8	95,510			
			S. Parent	0.5%	7.7	13,396			
			Couple	3.0%	46.4	89,600			
			Family	5.5%	85.1	176,647			
						375,153			
		Vision	Single	24.1%	373.1	24,625			
			Couple	17.6%	272.4	19,613			
			Family	52.2%	808.1	58,183			
						102,421	***2,879,266***	778 PHE NE NPFZZZZZ 900	
		Major Care	Single	23.9%	370.0	36,497			
			Couple	18.9%	292.6	35,674			
			Family	54.3%	840.6	122,055			
		SUBTOTAL DENTAL				***194,226***		778 PHE NE NPFZZZZZ 900	
		Basic Life				460,350			
		Supplemental Life				575,479			
		SUBTOTAL LIFE INSURANCE				***1,035,829***		778 PHE NE NPFZZZZZ 900	
		Dependent Life				***51,182***		778 PHE NE NPFZZZZZ 900	
		AD&D				***151,826***		778 PHE NE NPFZZZZZ 900	
				Total Prices		4,312,329			(1,445,636)

Hawaiian Electric Co., Inc.

Flex Plan Premiums & Prices

2007

Plan Options	Premium Per Month 2006 Medical	Premium Per Month 2007	Medical % Increase	FlexPlan Price per Pay Pd 2006	FlexPlan Price per Pay Pd 2007
Credits				67.54	67.54
PPP					
Single	202.74	210.41	3.783	67.18	67.68
Single Parent	407.41	422.22	3.635	71.49	72.49
Couple	490.27	508.10	3.637	78.96	80.46
Family	529.50	548.71	3.628	84.49	86.49
HPH Plus					
Single	232.89	249.77	7.248	67.18	67.68
Single Parent	449.17	482.46	7.411	71.49	72.49
Couple	540.52	580.58	7.411	78.96	80.46
Family	587.86	631.55	7.432	84.49	86.49
Kaiser					
Single	258.07	253.31	-1.845	67.18	67.68
Single Parent	495.50	486.35	-1.847	71.49	72.49
Couple	596.14	585.15	-1.844	78.96	80.46
Family	650.34	638.34	-1.845	84.49	86.49
Vision					
Single	5.08	5.08	0.000	2.75	2.75
Couple	10.15	10.15	0.000	3.00	3.00
Family	14.73	14.73	0.000	3.00	3.00
Major Care					
Single	32.32	31.29	-3.190	4.11	4.11
Couple	64.63	62.56	-3.200	5.08	5.08
Family	92.48	89.52	-3.200	6.05	6.05

Note:

Medical prices based on employee contribution per 2003 Negotiations
No price increase for Vision and Dental

	Single	SingleParent	Couple	Family
Medical	67.68	72.49	80.46	86.49
Vision	2.75	3.00	3.00	3.00
Dental	4.11	6.05	5.08	6.05
Total Prices	74.54	81.54	88.54	95.54
Less Credits	67.54	67.54	67.54	67.54
Employee Cont.	7.00	14.00	21.00	28.00

Hawaiian Electric Co., Inc.

Calculation of Medical Expense

2007

PLAN	COVERAG	1 % OF PARTICIPATION 1/1/2006	2 PROJECTED PARTICIPATION 2007	3 2007 MONTHLY PREMIUM RATES	4 MONTHLY PREMIUM FOR 2007 PARTICIPATION (2 x 3)	5 2007 ANNUAL PREMIUM
PPP	Single	9.0%	139.3	210.41	29,310	351,720
(HMSA)	S. Parent	2.2%	34.1	422.22	14,398	172,776
	Couple	8.0%	123.8	508.10	62,903	754,836
	Family	20.9%	323.5	548.71	177,508	2,130,096
					284,119	3,409,428
HPH Plus	Single	11.3%	174.9	249.77	43,685	524,220
(HMSA)	S. Parent	3.5%	54.2	482.46	26,149	313,788
	Couple	6.6%	102.2	580.58	59,335	712,020
	Family	19.6%	303.4	631.55	191,612	2,299,344
					320,781	3,849,372
Kaiser	Single	3.8%	58.8	253.31	14,895	178,740
	S. Parent	0.5%	7.7	486.35	3,745	44,940
	Couple	3.0%	46.4	585.15	27,151	325,812
	Family	5.5%	85.1	638.34	54,323	651,876
					100,114	1,201,368
Waive		6.1%	94.6			
		100.0%	1,548		705,014	8,460,168

778 PHE NE NPFZZZZZ 509	TOTAL	7,258,800
778 PHE NE NPFZZZZZ 509	TOTAL	1,201,368

Hawaiian Electric Co., Inc.
Calculation of Dental Expense
2007

PLAN	COVERAG	1 % OF PARTICIPATION 1/1/2006	2 PROJECTED PARTICIPATION 2007	3 2007 MONTHLY PREMIUM RATES	4 MONTHLY PREMIUM FOR 2007 PARTICIPATION (2 x 3)	5 2007 PROJECTED ANNUAL PREMIUM
Major Care	Single	23.9%	370.0	31.29	11,577	138,924
(HDS)	2 Party	18.9%	292.6	62.56	18,305	219,660
	Family	54.3%	840.6	89.52	75,251	903,012
					105,133	1,261,596
					210,266	
Waive		2.9%	44.8			
		100.0%	1,548		210,266	1,261,596

778 PHE NE NPFZZZZZ 509 TOTAL 1,261,596

HECO2007_1548_RateCase.Oct06.xls[Dental]
10/13/2006

Hawaiian Electric Co., Inc.
Calculation of Vision Expense
2007

		1	2	3	4	5
PLAN	COVERAG	% OF PARTICIPATION 1/1/2006	PROJECTED PARTICIPATION 2007	2007 MONTHLY PREMIUM RATES	MONTHLY PREMIUM FOR 2007 PARTICIPATION (2 x 3)	2007 PROJECTED ANNUAL PREMIUM
VISION	Single	24.1%	373.1	5.08	1,895	22,740
(VSP)	Couple	17.6%	272.4	10.15	2,765	33,180
	Family	52.2%	808.1	14.73	11,903	142,836
Waive		6.1%	94.4			
		100.0%	1,548		16,563	198,756

778 PHE NE NPFZZZZZ 509	TOTAL	198,756

Merit	49%
Bargaining	51%

HMSA

Blue Cross Blue Shield of Hawaii

An Independent Licensee of the Blue Cross and Blue Shield Association

August 17, 2006

Julie Price
Manager of Compensation and Benefits
Hawaiian Electric Company
PO Box 2750
Honolulu, HI 96840-0001

Dear Julie,

Thank you once again, for allowing HMSA to be the Health Plan of Choice for the employees of Hawaiian Electric Industries, Hawaiian Electric Company, and HEI's subsidiary companies. We look forward to serving you again during the new plan year effective January 1, 2007.

Active Employees

We have completed our review of your companies' health care claims experience to determine rates for the upcoming year and find that an overall rate increase of 8.5% is necessary for the Active Employees' coverage. The overall increase is comprised of an 8.5% medical rate increase and an 8.6% drug rate increase.

By implementing the 2007 plan year benefit modifications, as outlined in HEI/HECO's bargaining agreement with the IBEW, the overall rate change calculates to a 5.6% rate increase over the current plan year rates. The benefit modifications for the Preferred Provider Plan had a -4.9% impact to the plan rate, while the Health Plan Hawaii changes resulted in a -.5% rate decrease. The drug plan changes calculated a -3.1% savings to the current plan.

The annualized estimated savings associated with the 2007 benefit modifications, assuming membership as of May 2006, is $281,429.

Retired Employees

The overall rate change for the retirees' coverage calculates to a 12.9% rate increase, and it is comprised of a medical rate increase of 12.4% and a drug rate increase of 13.9%.

After applying the 2007 benefit modifications and associated rate changes as stated above, the overall rate change calculates to a 9.7% rate increase from the current plan year rates. The annualized estimated savings associated with the 2007 benefit modifications, assuming membership as of May 2006, is $101,774.

Renewal Exhibit

Exhibit I & II: Provides the rate calculation worksheets for the medical and drug programs for the active employees.

Exhibit III & III-A: Presents the Active employees' renewal rates and COBRA rates effective January 1, 2007 through December 31, 2007. Rates presented assume that both the Bargaining and Non-Bargaining employee groups will accept the 2007 benefit changes.

Exhibits IV & IV-A: Presents the Active employees' renewal rates and COBRA rates with the assumption that the Bargaining employees will accept the 2007 benefit modifications and the Non-bargaining employees will retain the 2006 plan benefits. This scenario may be necessary if the 2007 benefit changes are not acceptable to the Prepaid Council.

Exhibit V: Provides a listing of large claim cases in excess of $25,000 for the active employee group. Two large claim cases exceeded the $150,000 large claim cap during the experience period.

Exhibit A & B: Provides the medical and drug rate calculation worksheet for the retired employees.

Exhibit C & C-1: Presents the Retired Employees renewal and COBRA rates incorporating the 2007 benefit changes.

Exhibit D: Presents the large claim cases in excess of $25,000 for the retirees. No large claims cases exceeded the large claim cap for retirees.

Exhibit E: Provides for your review, a brief outline of the 2007 benefit modifications that were previously agreed to with the IBEW.

Please note: 65C Plus rates for 2007 will not be available for release until October 2006.

HMSA and its subsidiary companies offer a full range of employee benefit programs, which include Temporary and Long-Term Disability, Group Term Life Insurance, Accidental Death & Dismemberment, and Long Term Care. Please let me know if we can provide you with a quote or more information on any of these programs.

Once again, thank you for choosing HMSA. We appreciate the opportunity to continue to work with you to provide a quality health care program for the employees of HEI, HECO and the subsidiary companies.

If you have any questions regarding the above, please feel free to contact me 948-5507 or you mail e-mail me at john_hamakawa@hmsa.com.

Sincerely,

John A. Hamakawa
Senior Account Executive
Marketing

C: Myra O'Brien

Enclosures

	A	B	C	D	E	F	G	H
1	**Exhibit I**	**Renewal Calculation - Medical Plan**						
2	**Account:**	**Hawaiian Electric Company / Hawaiian Electric Industries - Active Employees (M386)**						
3								
4	Effective Date:		January 1, 2007 through December 31, 2007					
5	Beginning Date of Experience Period:		June 1, 2005					
6	Ending Date of Experience Period:		May 31, 2006					
7	Number of months of trend:		19					
8	Cumulative Subscribers:		20,858					
9	Cumulative Members:		57,133					
10								**PERCENT OF**
11						**TOTAL**	**PMPM**	**ADJUSTED DUES**
12								
13	**ADJUSTED DUES INCOME**					**$ 7,494,214**	**$ 131.17**	
14								
15		Account Estimated Incurred Benefits				**$ 6,496,247**	**$ 113.70**	**86.7%**
16								
17		**Benefits Exceeding Stop-Loss ($150,000)**				**$ (90,921)**	**$ (1.59)**	**-1.2%**
18		**Benefits Pooling Charge**				**$ 178,647**	**$ 3.13**	**2.4%**
19	**TOTAL ESTIMATED INCURRED BENEFITS**					**$ 6,583,973**	**$ 115.24**	**87.9%**
20								
21		Annual Trend			**0.073**			
22		Months of trend:			**19**			
23		Benefit Trend Adjustment				1.118		
24	**TOTAL TRENDED BENEFITS (F19 Times F23)**					**$ 7,360,882**	**$ 128.84**	**98.2%**
25								
26								
27		Managed Care/Quality Programs				$ 336,914	$ 5.90	4.5%
28	**TOTAL PROJECTED BENEFITS (F24 Plus F26 Plus F27)**					**$ 7,697,796**	**$ 134.73**	**102.7%**
29								
30		RETENTION				$ 482,089	$ 8.44	6.4%
31	**TOTAL PREMIUM COST (F28 Plus F30)**					**$ 8,179,885**	**$ 143.17**	**109.1%**
32								
33		APPLICATION OF INVESTMENT INCOME				$ (126,256)	$ (2.21)	-1.7%
34		RISK CHARGE				$ 76,978	$ 1.35	1.0%
35	**NET PREMIUM COST (F31 Plus F33 Plus F34)**					**$ 8,130,607**	**$ 142.31**	**108.5%**
36								
37	ACCOUNT RATE ADJUSTMENT							8.5%
38	MRG SYSTEM RATE ADJUSTMENT							8.5%
39	ACCOUNT CREDIBILITY							100.0%
40	MRG SYSTEM CREDIBILITY							0.0%
41								
42	**BLENDED RATE ADJUSTMENT**							**8.5%**
43	**APPLIED RATE ADJUSTMENT**							**8.5%**

	A	B	C	D	E	F	G	H
1	Exhibit II	**Renewal Calculation - Drug Plan**						
2	**Account:**	**Hawaiian Electric Company / Hawaiian Electric Industries - Active Employees (M386)**						
3								
4	Effective Date:	January 1, 2007 through December 31, 2007						
5	Beginning Date of Experience Period:		June 1, 2005					
6	Ending Date of Experience Period:		May 31, 2006					
7	Number of months of trend:		19					
8	Cumulative Subscribers:		20,367					
9	Cumulative Members:		56,265					
10								
11								**PERCENT OF**
12						**TOTAL**	**PMPM**	**ADJUSTED DUES**
13	**ADJUSTED DUES INCOME**							
14						$ 2,102,802	$ 37.37	
15		Account Estimated Incurred Benefits						
16						$ 2,031,967	$ 36.11	96.6%
17		Annual Trend						
18		Months of trend:			0.083			
19		Benefit Trend Adjustment			19			
20						1.135		
21	**TOTAL TRENDED BENEFITS (F15 times F19)**							
22		Drug Rebate				$ 2,306,283	$ 40.99	109.7%
23						$ (201,522)	$ (3.58)	-9.6%
24	**TOTAL PROJECTED BENEFITS (F21 Plus F22)**							
25		RETENTION				$ 2,104,761	$ 37.41	100.1%
26						$ 161,378	$ 2.87	7.7%
27	**TOTAL PREMIUM COST (F24 plus F25)**							
28						$ 2,266,139	$ 40.28	107.8%
29		APPLICATION OF INVESTMENT INCOME						
30		RISK CHARGE				$ (33,263)	$ (0.59)	-1.6%
31						$ 50,514	$ 0.90	2.4%
32	**NET PREMIUM COST (F27 Plus F29 Plus F30)**							
33						$ 2,283,390	$ 40.58	108.6%
34	ACCOUNT RATE ADJUSTMENT							
35	MRG SYSTEM RATE ADJUSTMENT							8.6%
36	ACCOUNT CREDIBILITY							1.0%
37	MRG SYSTEM CREDIBILITY							100.0%
38								0.0%
39	**BLENDED RATE ADJUSTMENT**							8.6%
40	**APPLIED RATE ADJUSTMENT**							8.6%

EXHIBIT III
MRG ACCOUNT : HAWAIIAN ELECTRIC INDUSTRIES, INC. - ACTIVES
MRG CODE : 386 EFFECTIVE: JANUARY 1, 2007 THROUGH DECEMBER 31, 2007

SUMMARY OF RATES FOR HAWAIIAN ELECTRIC INDUSTRIES, INC. - ACTIVES
(BENEFIT CHANGES FOR BOTH BU AND NBU)

623 -1	HECO BU PPP
68622 -1	HECO BU PPP (COBRA)
99380 -1	HECO BU PPP LTD
5331 -1	HELCO BU PPP
56326 -1	HELCO BU PPP (COBRA)
98924 -1	HELCO BU PPP LTD
9744 -1	MECO BU PPP
68098 -1	MECO BU PPP (COBRA)
98921 -1	MECO BU PPP LTD
50463 -1	HECO NBU PPP
56314 -1	HECO NBU PPP (COBRA)
98919 -1	HECO NBU PPP LTD
45281 -1	HELCO NBU PPP
56402 -1	HELCO NBU PPP (COBRA)
99385 -1	HELCO NBU PPP LTD
39409 -1	MECO NBU PPP
56411 -1	MECO NBU PPP (COBRA)
99382 -1	MECO NBU PPP LTD
54558 -1	HEI PPP
62044 -1	HEI PPP (COBRA)
54558 -6	HPC PPP
84752 -1	HPC PPP (COBRA)
56916 -1	PECS PPP
56916 -2	PECS PPP (COBRA)
97667 -1	HEI BOD PPP

	BASIC RATES 625	DRUG RATES 395	TOTAL NEW RATES	0.1% BASIC HBHC FEE	0.1% DRUG HBHC FEE	TOTAL NEW RATES WITH FEE
Single	$146.96	$63.24	$210.20	$0.15	$0.06	$210.41
Sub/Spouse	$393.74	$113.86	$507.60	$0.39	$0.11	$508.10
Sub/Child(ren)	$326.90	$94.90	$421.80	$0.33	$0.09	$422.22
Family	$427.98	$120.18	$548.16	$0.43	$0.12	$548.71

Rates for COBRA groups do not include administrative fees.

EXHIBIT III
MRG ACCOUNT : HAWAIIAN ELECTRIC INDUSTRIES, INC. - ACTIVES
MRG CODE : 386 EFFECTIVE: JANUARY 1, 2007 THROUGH DECEMBER 31, 2007

62469 -1	HECO BU HPH
69487 -1	HECO BU HPH (COBRA)
98920 -1	HECO BU HPH LTD
62471 -1	HELCO BU HPH
69489 -1	HELCO BU HPH (COBRA)
99384 -1	HELCO BU HPH LTD
62473 -1	MECO BU HPH
69491 -1	MECO BU HPH (COBRA)
99383 -1	MECO BU HPH LTD
60863 -1	HECO NBU HPH
62977 -1	HECO NBU HPH (COBRA)
99381 -1	HECO NBU HPH LTD
60865 -1	HELCO NBU HPH
69488 -1	HELCO NBU HPH (COBRA)
98923 -1	HELCO NBU HPH LTD
60866 -1	MECO NBU HPH
69490 -1	MECO NBU HPH (COBRA)
98922 -1	MECO NBU HPH LTD
80160 -1	HEI HPH
84674 -1	HEI HPH (COBRA)
80162 -1	HPC HPH
84676 -1	HPC HPH (COBRA)
63100 -2	PECS HPH
63112 -1	PECS HPH (COBRA)

	BASIC RATES Z-N	DRUG RATES 396	TOTAL NEW RATES	0.1% BASIC HBHC FEE	0.1% DRUG HBHC FEE	TOTAL NEW RATES WITH FEE
Single	$186.28	$63.24	$249.52	$0.19	$0.06	$249.77
Sub/Spouse	$466.14	$113.86	$580.00	$0.47	$0.11	$580.58
Sub/Child(ren)	$387.08	$94.90	$481.98	$0.39	$0.09	$482.46
Family	$510.74	$120.18	$630.92	$0.51	$0.12	$631.55

Rates for COBRA groups do not include administrative fees.

EXHIBIT III
MRG ACCOUNT : HAWAIIAN ELECTRIC INDUSTRIES, INC. - ACTIVES
MRG CODE : 386 EFFECTIVE: JANUARY 1, 2007 THROUGH DECEMBER 31, 2007

82383 -1 HECO BU HPH PLUS
84541 -1 HECO BU HPH PLUS (COBRA)
82385 -1 HELCO BU HPH PLUS
84750 -1 HELCO BU HPH PLUS (COBRA)
82384 -1 MECO BU HPH PLUS
84751 -1 MECO BU HPH PLUS (COBRA)

	BASIC RATES Z-N	0.1% BASIC HBHC FEE	TOTAL NEW RATES WITH FEE
Single	$186.28	$0.19	$186.47
Sub/Spouse	$466.14	$0.47	$466.61
Sub/Child(ren)	$387.08	$0.39	$387.47
Family	$510.74	$0.51	$511.25

Rates for COBRA groups do not include administrative fees.

KAISER PERMANENTE

August 29, 2006

Ms. Julie Price
Director, Benefits
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, HI 96840-0001

RE: Rate Renewal Effective January 1, 2007 through December 31, 2007

Dear Julie:

This correspondence is to inform you of the upcoming rate renewal for the Hawaiian Electric Company, Inc., that will be effective January 1, 2007 through December 31, 2007. The proposed rates are in alignment with the benefits that have been agreed upon with the bargained units for the companies that are associated with Hawaiian Electric Company, Inc. The benefit package for the 2007 plan year will be a $18 office visit, $18 charge per department per day for outpatient laboratory and radiology services, and a $14 prescription drug copayment.

Active Employees:

Subgroups 009, 010,0111,014,020,021:

Employee	$253.31
Employee & Spouse	$585.15
Employee & Child(ren)	$486.35
Employee & Family	$638.34

Subgroup 013:

Employee	$253.31
Employee & Spouse	$585.15
Employee & Child(ren)	$486.35
Employee & Family	$638.34

Retirees under 65:

Subgroups 018, 019, 023

Employee	$455.96
Employee + One	$911.92
Employee + Two or More	$1,367.88

Subgroup 022

Employee	$455.96
Employee + One	$911.92
Employee + Two or More	$1,367.88

Kaiser Foundation Health Plan, Inc.
711 Kapiolani Boulevard, Tower Bldg., Suite 400
Honolulu, Hawaii 96813

Retirees over 65 w/Prescription Drugs:

Employee	$414.54
Employee + One	$829.08
Employee + Two or More	$1,243.62
Medicare Member	$130.00
Medicare + Non-Medicare Spouse	$544.54
Medicare + Medicare Spouse	$260.00

Retirees over 65 w/o Prescription Drugs:

Employee	$414.54
Employee + One	$829.08
Employee + Two or More	$1,243.62
Medicare Member	$110.02
Medicare + Non-Medicare Spouse	$524.56
Medicare + Medicare Spouse	$220.04

The Rate Adjustment Factor (RAF) has decreased from 1.1094 to 1.0696 for the medical service utilization and decreased from 1.0165 to 0.9665 for the prescription drug utilization. I've enclosed the rate renewal backup information along with the "Summary of Important Changes for 2007" with this correspondence.

Please review the information enclosed in this rate renewal packet and I will be available to meet with you in the coming weeks to review and go over any questions that you may have about the renewal. Please contact me at 292-6436 or via email at Rob.Chung@kp.org to set up the meeting in the coming weeks.

Sincerely,

Rob A. Chung
Senior Account Manager
Business Development

enclosures

Rate Change Analysis

KAISER PERMANENTE
Kaiser Foundation Health Plan
Hawaii Region

Group Name: Hawaiian Electric
Group Number: 00182
Subgroup Name: HECO, MECO, HELCO (BU and NBU), HEI Corporate
Subgroup Number: 009, 010, 011, 014, 020, 021. 013
Account Rep: Rob
Underwriter: ay
Renewal Quote ID: None
Prior Quote ID: None
*** Rates subject to future State of Hawaii Dept of Insurance requirements ***

RAF: 1.0696
Prior RAF: 1.1094
Rx RAF: 0.9665
Prior Rx RAF: 1.0165
Prior Reg Fee: $15.00
Prior Rx Copay: $12.00

	Renewal Year	*Prior Year*		
First Step Subscriber Rate	**Effective 1/1/07 12/31/07**	**Effective 1/1/06 12/31/06**	**Rate Change**	**Percent Change**
Medical Plan $15 (No Charge Lab, Imaging, & Testing)	244.62	237.35	7.27	3.06%
Base RAF Adjustment	17.03	25.97	(8.94)	-34.42%
Total Base Medical Plan	**261.65**	**263.32**	**(1.67)**	**-0.63%**
Prescription Drug Rider 14	27.16	27.14	0.02	0.07%
Drug RAF Adjustment	(0.91)	0.45	(1.36)	-302.22%
Total Prescription Drug Plan	**26.25**	**27.59**	**(1.34)**	**-4.86%**
Supplemental Benefits				
$18 Registration Fee	(1.54)		(1.54)	New Item
$50 Copay Per Hosp. Adm	(0.44)	(0.44)	-	0.00%
$18 Outpatient LIT	(3.58)	(2.97)	(0.61)	20.54%
Large Group Copay Response Adjustment	(0.92)	(0.94)	0.02	-2.13%
$15 Registration Fee		(0.48)	0.48	-100.00%
Total Supplemental Benefits	**(6.48)**	**(4.83)**	**(1.65)**	**34.16%**
Administrative Charges				
Broker Load				
APP Adjustment				
HBHC Load	0.24	0.24	-	0.00%
Total Administrative Charges	**0.24**	**0.24**	**-**	**0.00%**
Total Standard Rate Before Adjustments	**281.66**	**286.32**	**(4.66)**	**-1.63%**
Family Mix Change Impact				
4-Step (1 : 2.31 : 1.92 : 2.52) Rate Factor	**1.05**	**1.08**		
Re-ratioed Rate	**296.18**	**308.36**	**(12.18)**	**-3.95%**
Other Adjustments				
Decomposite Adjustment - Actives	(42.19)	(50.29)	8.10	-16.11%
Rate Reconciliation - 2006 (Revenue Adjustment)	(0.68)		(0.68)	New Item
Dental				
Total Adjustments	**(42.87)**	**(50.29)**	**7.42**	**-14.75%**
Total Rate After Adjustments	**253.31**	**258.07**	**(4.76)**	**-1.84%**
Total "Billed" Rate Step 1	**253.31**	**258.07**	**(4.76)**	**-1.84%**
Step 2	**585.15**			
Step 3	**486.35**			
Step 4	**638.34**			

Footnotes:

* *The Health Plan Community Rate Change is the difference in the base rates for the contract periods above.*
* *Rates are based on the standard 3-tier distribution and adjusted to the group specific billing basis.*
* *Base rates for medical and drug are adjusted by the medical and drug specific HP CRI and RAF.*
* *Supplemental benefits are adjusted by the Health Plan Community Rate change for that line of coverage.*
* *The Total Billed Rate is the finalized rate for 2006 and 2007.*

DELTA DENTAL

www.deltadentalhi.org

HDS
Hawaii Dental Service

July 18, 2006

Ms. Myra O'Brien
Hawaiian Electric Industries
PO Box 2750
Honolulu, HI 96840

RE: Hawaiian Electric Industries
HDS Group No. 0118

Dear Myra:

Hawaii Dental Service (HDS) has been providing dental benefits coverage to the people of Hawaii for over 40 years. We are committed to partnering with you to provide your employees a quality dental plan. Enclosed for your review are the rate renewal calculation sheet and the Group Experience Report for Hawaiian Electric Industries.

The 24-month Rate Calculation indicates a 1.4% decrease. However, HDS offers to renew the plan for the contract period beginning January 1, 2007 through December 31, 2007 at a 3.2% decrease. Over the last two contract periods, the group's stabilization has resulted in a cumulative net surplus of $361,235 (approximately 1.5 months of premiums). At these new rates, we are projecting the surplus to remain the same. The rates are shown below:

	Actives			Retirees
	Active	COBRA		
One Party:	$31.29	$31.92	Composite:	$63.82
Two Party:	$62.56	$63.81		
Three Party+:	$89.52	$91.31		

We appreciate your continued trust in selecting HDS as your group's dental benefits provider. Elaine Fujiwara, your Marketing and Sales Manager, will be happy to discuss the renewal information. Please do not hesitate to contact her at 529-9261.

Sincerely,

Lynette C. Arakawa

Lynette C. Arakawa
Director Marketing and Sales

LCA:pei

Enclosures

Hawaii Dental Service
700 Bishop Street, Suite 700
Honolulu, Hawaii 96813-4196

Telephone: 808-521-1431
Toll Free: 800-232-2533
Fax: 808-529-9368

VSP

MONICA ENGLE
ACCOUNT EXECUTIVE

August 28, 2006

Ms. Myra O'Brien
Benefits Administrator
HAWAIIAN ELECTRIC INDUSTRIES, INC.
P.O. Box 2750
Honolulu, HI 96840

RE: VISION PLAN – 2007 RATE CONFIRMATION

Dear Myra:

Pursuant to your request, this letter serves as confirmation that the renewal rates effective January 1, 2006 are guaranteed for a twenty-four month term. The following rates will be continued through December 31, 2007:

ACTIVE EMPLOYEES		RETIREES	
Employee Only:	$ 5.08	Composite:	$10.85
Employee + One Dependent:	$10.15		
Employee + Two or More Dependents:	$14.73		

Please let me know if you require anything further. You may reach me at 524-4877, extension 13 or via email at monica.engle@vsp.com

Sincerelv.

MONICA B. ENGLE
Account Executive

VSP
1001 BISHOP STREET, PAUAHI TOWER, SUITE 890, HONOLULU, HI 96813
TEL: 808-524-4877 800-522-5162 FAX: 808-533-0604
VISIT OUR WEB SITE AT VSP.COM

Hawaiian Electric Co., Inc.

Calculation of Group Life Insurance - BASIC

2007

		MERIT		BU	TOTAL
Average Salary for January 2007 Enrollment		76,598		59,872	
	x	1.0000			
		76,598			
Salary/Wage Adjustment	x	1.0000	x	1.0000	
		76,598		59,872	
Insurance Allowance	x	2.0	x	1.5	
Projected No. of Merit and BU Employees	x	759	x	789	
Projected Total Basic Coverage		116,275,764		70,858,512	
Annual Premium	x	0.00246	x	0.00246	
2007 Projected Basic Group Life Expense		286,038		174,312	460,350

Supplemental	575,479
778 PHE NE NPFZZZZZ 509	**1,035,829**

Group Life	
Basic	460,350
Supplemental	575,479
	1,035,829
Dependent Life	51,182
Accidental Death	151,826
Total	1,238,837

No. of Merit Employees	49%
No. of BU Employees	51%

Hawaiian Electric Co., Inc.

Calculation of Group Life Insurance - SUPPLEMENTAL

2007

2 1/2 Coverage

Age	2007 Enrolled Merit Avg Salary	2007 Enrolled Barg Avg Wage	Proj. No. of Merit Employees	Proj. No. of BU Employees	2007 Projected Coverage	Annual Premium	2007 Supplemental Premium	TOTAL
0 - 29	76,598	59,872	3	3	294,513	0.00077	227	
30 - 34	76,598	59,872	9	9	883,539	0.00086	760	
35 - 39	76,598	59,872	11	12	1,139,753	0.00143	1,630	
40 - 44	76,598	59,872	21	22	2,121,463	0.00191	4,052	
45 - 49	76,598	59,872	21	22	2,121,463	0.00276	5,855	
50 - 54	76,598	59,872	22	23	2,219,634	0.00485	10,765	
55 - 59	76,598	59,872	16	17	1,630,608	0.00781	12,735	
60 - 64	76,598	59,872	10	10	981,710	0.01320	12,959	
65/+	76,598	59,872	2	2	196,342	0.02474	4,858	53,841

3 1/2 Coverage

Age	2007 Enrolled Merit Avg Salary	2007 Enrolled Barg Avg Wage	Proj. No. of Merit Employees	Proj. No. of BU Employees	2007 Projected Coverage	Annual Premium	2007 Supplemental Premium	TOTAL
0 - 29	76,598	59,872	13	13	3,050,333	0.00077	2,349	
30 - 34	76,598	59,872	38	39	9,036,102	0.00086	7,771	
35 - 39	76,598	59,872	96	99	22,884,768	0.00143	32,725	
40 - 44	76,598	59,872	144	150	34,506,768	0.00191	65,908	
45 - 49	76,598	59,872	151	157	36,149,255	0.00276	99,772	
50 - 54	76,598	59,872	115	119	27,462,691	0.00485	133,194	
55 - 59	76,598	59,872	66	69	15,845,538	0.00781	123,754	
60 - 64	76,598	59,872	12	13	2,935,436	0.01320	38,748	
65/+	76,598	59,872	3	3	703,923	0.02474	17,415	521,636

HECO-1217
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PAGE 2 OF 5

Hawaiian Electric Co., Inc.

Calculation of Group Life Insurance - SUPPLEMENTAL for $50,000 coverage 2007

$50,000 Coverage

Age	2007 Enrolled Merit Avg Coverage	2007 Enrolled BU Avg. Covera	Proj. No. of Merit Employees	Proj. No. of BU Employees	2007 Projected Coverage	Annual Premium	2007 Supplemental Premium	TOTAL
0 - 29	0	306	0	0	0	0.00077	0	
30 - 34	0	306	1	1	306	0.00086	0	
35 - 39	0	306	2	2	612	0.00143	1	
40 - 44	0	306	0	0	0	0.00191	0	
45 - 49	0	306	0	0	0	0.00276	0	
50 - 54	0	306	1	1	306	0.00485	1	
55 - 59	0	306	0	0	0	0.00781	0	
60 - 64	0	306	0	0	0	0.01320	0	
65/+	0	306	0	0	0	0.02474	0	2
						TOTAL		2

No. of Merit Employees	49%
No. of BU Employees	51%

HECO-1217
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PAGE 3 OF 5

Hawaiian Electric Co., Inc.

Calculation of Dependent Life Insurance

2007

Plan	Participation as of Jan-06	No. of Emp Enrolled	Annual Rate	TOTAL
10K	6.40%	99	$26.76	2,649
25K	44.50%	689	$70.44	48,533
				51,182
			778 PHE NE NPFZZZZZ 509	**51,182**

Hawaiian Electric Co., Inc.

Calculation of Accidental Death & Dismemberment

2007

		MERIT		BU		TOTAL
Average Single Coverage		182,905		172,466		
	x	1.0000				
		182,905				
Salary/Wage Adjustment	x	1.0000	x	1.0000		
		182,905		172,466		
Projected No. of Merit and BU Employees [1]	x	759	x	789		
		138,824,895		136,075,674		
Average Merit plus BU Single Coverage						177,584
Participation					x	457
Annual Single Rate					x	0.00042
Single Coverage Premium						34,085
Average Family Coverage		221,283		195,375		
	x	1.0000				
		221,283				
Salary/Wage Adjustment	x	1.0000	x	1.0000		
		221,283		195,375		
Projected No. of Merit and BU Employees [1]	x	759	x	789		
		167,953,797		154,150,875		
Average Merit plus BU Family Coverage						208,078
Participation					x	813
Annual Family Rate					x	0.000696
Family Coverage Premium						117,741
					TOTAL	151,826

778 PHE NE NPFZZZZZ 509 **151,826**

Note:

[1] No. of Merit Employees 49%
No. of BU Employees 51%

HECO2007_1548_RateCase.Oct06.xls[AD&D]
10/13/2006

HECO'S PORTION OF TOTAL (ALL YEARS) COST for HR SUITE PROJECT
By Cost Type, Phase & Stage

(Thousands [1])

Capital Deferred Expense	Cost Type	Phase 1 Stage 1	Phase 1 Stage 2	Phase 1 Stage 3	Phase 1 Total	Phase 2 Stage 1	Phase 2 Stage 2	Phase 2 Stage 3	Phase 2 Total	Project Total
Capital	MATERIAL	-	125	-	125	-	-	-	-	125
	OVERHEAD	-	14	-	14	-	-	-	-	14
	OTHER	-	174	-	174	-	-	-	-	174
	TOTAL	-	312	-	312	-	-	-	-	312
Deferred	LABOR	-	200	-	200	-	147	-	147	348
	OVERHEAD	-	117	-	117	-	83	-	83	200
	O/S SVC	-	990	-	990	-	608	-	608	1,598
	OTHER	-	644	-	644	-	110	-	110	754
	AFUDC	-	93	-	93	-	29	-	29	121
	TOTAL	-	2,044	-	2,044	-	977	-	977	3,021
Expense - Not Reengineering	LABOR	42	41	38	121	0	-	64	64	185
	OVERHEAD	28	52	27	107	0	17	44	61	168
	O/S SVC	170	165	12	347	61	101	2	165	512
	OTHER	-	71	-	71	-	12	-	12	83
	TOTAL	240	329	77	646	62	131	110	302	948
Expense - Reengineering	LABOR	-	16	-	16	-	-	-	-	16
	OVERHEAD	-	11	-	11	-	-	-	-	11
	TOTAL	-	27	-	27	-	-	-	-	27
TOTAL	TOTAL	240	2,712	77	3,029	62	1,108	110	1,279	4,308

1. The detail amounts are rounded which may cause differences in the totals.

HECO'S PORTION OF 2007 COST for HR SUITE PROJECT
By Cost Type, Phase & Stage

(Thousands [1])

Capital Deferred Expense	Cost Type	Phase 1 Stage 1	Phase 1 Stage 2	Phase 1 Stage 3	Phase 1 Total	Phase 2 Stage 1	Phase 2 Stage 2	Phase 2 Stage 3	Phase 2 Total	Project Total
Capital	MATERIAL	-	125	-	125	-	-	-	-	125
	OVERHEAD	-	14	-	14	-	-	-	-	14
	OTHER	-	174	-	174	-	-	-	-	174
	TOTAL	-	312	-	312	-	-	-	-	312
Deferred	LABOR	-	200	-	200	-	41	-	41	242
	OVERHEAD	-	117	-	117	-	23	-	23	140
	O/S SVC	-	990	-	990	-	137	-	137	1,127
	OTHER	-	644	-	644	-	110	-	110	754
	AFUDC	-	93	-	93	-	2	-	2	95
	TOTAL	-	2,044	-	2,044	-	314	-	314	2,358
Expense - Not Reengineering	LABOR	30	41	38	109	0	-	9	9	118
	OVERHEAD	21	52	27	100	0	4	6	11	110
	O/S SVC	151	183	12	345	61	22	-	83	428
	OTHER	-	71	-	71	-	12	-	12	83
	TOTAL	201	347	77	625	62	38	15	115	740
Expense - Reengineering	LABOR		16		16	-	-	-	-	16
	OVERHEAD		11		11	-	-	-	-	11
	TOTAL		27	-	27	-	-	-	-	27
TOTAL	TOTAL	201	2,730	77	3,008	62	353	15	429	3,436

1. The detail amounts are rounded which may cause differences in the totals.

HR Suite Project
2007 Test Year
($ Thousands)

Account	Labor/On Costs	Non-Labor	Total
Expense			
920	14		14
921	14		14
926	311	428	739
Total	339	428	767
Amortization[1]			
921			8
925			1
926			5
Total			14 [2]

[1] Based on estimated deferred costs as of Nov 2007 of $2,044,000 amortized over 12 yrs.
[2] Represents one month of amortization

Ho'okina Awards Program
Test Year 2007

NARUC	_RA	_Act	_Loc	_Ind	_Proj	_EE	FY07
506	PPA	723	PPO	NE	NPPZZZZZ	900	$ 42,000
566	PPA	723	PTO	NE	NPPZZZZZ	900	16,000
588	PPA	723	PDO	NE	NPPZZZZZ	900	44,000
921	PPA	723	PHE	NE	NPPZZZZZ	900	114,000
							$ 216,000

HECO T-13
DOCKET NO. 2006-0386

TESTIMONY OF
BRUCE TAMASHIRO

DIRECTOR, CORPORATE AND PROPERTY ACCOUNTING
HAWAIIAN ELECTRIC COMPANY, INC.

Subjects: Miscellaneous Administrative and General Expenses
Depreciation Expense and Accumulated Depreciation
Miscellaneous Other Operating Revenues

INTRODUCTION

Q. Please state your name and business address.

A. My name is Bruce Tamashiro and my business address is 900 Richards Street, Honolulu, Hawaii.

Q. By whom are you employed and in what capacity?

A. I am the Director of Corporate and Property Accounting for Hawaiian Electric Company, Inc. ("HECO"). My educational background and experience are listed in HECO-1300.

Q. What is your area of responsibility in this proceeding?

A. I am responsible for presenting the Company's:

1) overall normalized test year 2007 estimates for Miscellaneous Administrative and General ("A&G") expenses, which include account numbers 928, 9301, 9302, 931 and 932;
2) test year 2007 estimates for depreciation expense and accumulated depreciation; and
3) test year 2007 estimates for miscellaneous other operating revenues, which include account numbers 414, 451, 454 and 456.

MISCELLANEOUS A&G EXPENSES

Q. What are the accounts and test year 2007 estimates for the Miscellaneous A&G expenses?

A. As shown in HECO-1301, the Miscellaneous A&G accounts and the associated estimates totaling $7,487,000 for the test year 2007, are as follows:

Acct No.	Description	Test Yr 2007 Estimate
928	Regulatory Commission Expenses	$ 283,000

9301	Inst / Goodwill Advertising	30,000
9302	Miscellaneous General Expenses	3,315,000
931	Rent Expense	2,757,000
932	Maintenance of General Plant	1,102,000
	TOTAL	$ 7,487,000

Q. What is the nature of the costs charged to these accounts?

A. These accounts capture a variety of costs which are necessary for Company operations, but which are not reflected in other functional accounts. I will discuss each account in detail below.

Account 928 – Regulatory Commission Expenses

Q. What is the Company's test year 2007 estimate for account 928 – Regulatory Commission Expenses?

A. The test year 2007 estimate for account 928 – Regulatory Commission Expenses is $283,000 as shown in HECO-1303.

Q. What is included in account 928 - Regulatory Commission Expenses?

A. Account 928 includes the amortization of $849,000 of external costs that the Company will incur for this rate case, as shown in HECO-1303, over a three year period. External costs consist of outside attorney fees, outside consultant fees, stenographer fees, printing costs and supplies. The estimated external costs as shown in HECO-1303 will be updated to account for additional costs in the next available opportunity of this proceeding.

Q. How was the test year 2007 estimate determined?

A. The Company estimated the external costs related to the rate case proceeding. The external costs related to this rate case are being amortized over three years, based on the Company's anticipated timing of rate case filings. These costs, when incurred, are accumulated in a deferred debit account and amortized to account 928.

Q. Has the Company fully amortized its regulatory commission expenses from its 2005 Rate Case (Docket No. 04-0113)?

A. No. The Company has not fully amortized its regulatory commission expenses from its 2005 rate case and is currently amortizing these expenses over a three-year period as agreed in the Stipulated Settlement Letter, dated September 16, 2005, which was accepted by the Hawaii Public Utilities Commission for purposes of the Interim Decision and Order No. 22050, issued on September 27, 2005. However, the unamortized rate case expenses from the Company's pending test year 2005 rate case were excluded from account 928.

Q. Why were these expenses excluded from the test year estimates?

A. In Docket No. 7064, Decision and Order No. 12679 issued October 13, 1993 in East Honolulu Community Services, Inc.'s request for a general rate increase, the Commission ruled that unrecovered rate case expenses from past proceedings may not be recovered in a subsequent rate case. Therefore, regulatory commission expenses incurred for the 2005 Rate Case were not included in the test year estimates.

Q. Are internal costs related to this rate case included in account 928?

A. No. HECO's internal costs related to this rate case are not included in the test year 2007 estimates for account 928. Employees involved in rate case work charge their labor and related non-labor costs to the various functional accounts that they normally charge.

<u>Account 9301 – Institutional or Goodwill Advertising</u>

Q. What is the Company's test year 2007 estimate for account 9301 – Institutional or Goodwill Advertising?

A. The Company's test year 2007 estimate for account 9301 – Institutional or Goodwill Advertising is $30,000, as shown in HECO-1301.

Q. What types of expenses are included in this account?

A. Account 9301 includes expenses related to general advertising for community related events, such as the Christmas Electric Light Parade. Additionally, the account includes costs to set up and take down Christmas decorations at the Company's King Street building during the Christmas season.

Q. How was the test year estimate determined?

A. The test year amounts were determined by estimating the total costs for advertising production, media air time and media buying services for community programs expected to be supported in 2007 and by examining prior year recorded information related to the Christmas decorations at the King Street building.

Q. How does the test year 2007 estimate compare with the amounts recorded in 2005?

A. The test year 2007 estimate has decreased from what was recorded in 2005. The decrease is attributable to the Company not participating in the Electron Marathon in 2007.

Q. Has the Commission approved these types of expenses in past rate cases?

A. Yes. In Interim Decision and Order No. 22050, dated September 27, 2005, in Docket No. 04-0113, the Commission adopted, on an interim basis, the Parties' Stipulated Settlement Letter which included these types of expenses. Also, the Commission has approved these types of expenses in previous rate cases, including Docket No. 7766, in Decision and Order 14412 issued on December 11, 1995.

<u>Account 9302 – Miscellaneous General Expenses</u>

Q. What types of costs are included in account 9302 – Miscellaneous General Expenses?

A. Account 9302 includes the costs for the Company's:

1) Research and Development;
2) Development and Demonstration of New Technology;
3) Community Service Activities;
4) Company Memberships Dues;
5) Ellipse Software Maintenance Fees; and
6) Other miscellaneous expenses.

I will describe each of these costs below. A summary of the costs is located on page 1 of HECO-1304.

Q. What is the Company's test year 2007 estimate for account 9302 – Miscellaneous General Expenses?

A. The test year 2007 estimate for account 9302 – Miscellaneous General Expenses is $3,315,000, as shown on page 1 of HECO-1304.

Q. How does the test year 2007 estimate compare with recorded amounts for 2005?

A. As shown on HECO-1302, the test year 2007 estimate is higher than the recorded amount for 2005 by $474,000. The reasons for the overall variance are primarily due to increases relating to: 1) a net increase in the costs of research and development, 2) a net increase in the costs of development and demonstration of new projects, particularly for the Company's new Automated Meter Infrastructure project, 3) the recordation of HECO's 2005 EEI membership dues in NARUC Account No. 921, but which should have been recorded to this account, and 4) a decrease in Ellipse maintenance fees amortization.

1) Research and Development

Q. What is the Company's test year 2007 estimate for research and development expense?

A. The Company's test year 2007 estimate for research and development expense is $2,064,000 as shown on page 2 at HECO-1304.

Q. What is included in the Company's test year 2007 estimate for research and development expense?

A. In general, included are expenses associated with HECO's membership in the Electric Power Research Institute ("EPRI"), and research and development activities to further HECO's evaluation and implementation of new technologies related to electric utility operations, renewable energy and alternate energy, and the development of emerging technologies.

EPRI membership dues

Q. What is the Company's test year 2007 estimate of EPRI membership dues?

A. The Company's test year 2007 estimate of EPRI membership dues is $1,608,000 as shown on page 2 of HECO-1304.

Q. How was the test year 2007 estimate for the EPRI membership dues determined?

A. The 2007 EPRI membership dues are based on a new multi-year membership agreement (5-year), between HECO and EPRI. The previous multi-year membership agreement, covering the period from 2003 to 2005, required annual EPRI membership dues of $1,986,000 each year, of which $1,531,200 was HECO's allocated share. Under the terms of the new multi-year membership agreement, which covers the period from 2007 to 2011, the 2007 annual EPRI membership dues increased by 5% to approximately $2,085,000, of which approximately $1,608,000 will be HECO's allocated share, as shown on page 2 of HECO-1304

Q. Was HECO a member of EPRI in 2006?

A. No. HECO chose to not renew its EPRI membership in 2006 due to: 1) budget constraints, and 2) a loss of flexibility in the use of EPRI unallocated funds, under the previous EPRI agreement.

Q. During the 2006 time period when HECO was not a member of EPRI, did HECO lose all benefits of an EPRI membership?

A. No. EPRI believed our budgetary situation was a short-term event. Therefore, during 2006, EPRI allowed HECO to keep the various research and development projects that had existing funding commitments active with the understanding that HECO would join EPRI again in 2007.

Q Is the test year 2007 EPRI membership different from the Company's EPRI membership in 2005?

A. Yes. In 2005, HECO was in the third and final year of a 3-year membership agreement with EPRI. Under this agreement, HECO was a "100%-buy" member, whereby HECO was offered a wide variety of programs, project sets, and projects (collectively referred to as products) for a fixed annual membership payment.

In 2007, since the "100%-buy" does not offer the same benefits as the 2005 "100% buy" membership, HECO and EPRI have negotiated to provide HECO a program that will offer the full spectrum of EPRI products and flexibility of using EPRI funds, at a fixed annual membership due, under its new multi-year membership agreement.

Q. How do HECO and its customers benefit from the Company's membership in EPRI?

A. The primary benefit for both HECO and its customers result from HECO's access to information, whether it is through reports, computer software, presentations by EPRI personnel and technical experts, web casts, electronic mail or telephone inquiries. EPRI spends millions of dollars each year on research that would otherwise be far beyond the capability of any one utility to finance and administer.

HECO is also able to leverage local research and development funds with EPRI funds to conduct research, development and demonstration projects and studies related to HECO projects, thus addressing specific needs of HECO.

Q. What are some of the specific benefits enjoyed by HECO from its membership in EPRI?

A. HECO has obtained direct benefits through EPRI's participation in HECO-related projects, seminars and presentations both here in Hawaii and in other states. HECO is able to tap the expertise of EPRI researchers in a wide variety of technological areas, who provide useful information directly to HECO. In addition, HECO's participation in EPRI-sponsored meetings on the mainland allows HECO's staff and executives to meet and interact with their mainland peers. The development of these personal relationships is valuable in the exchange of information and dialog with other utilities facing similar issues.

In recent years, for example, EPRI funds have been directed towards HECO specific projects to optimize power plant maintenance techniques, implement predictive maintenance tools and procedures, equipment evaluation and techniques to enhance the transmission and delivery of electrical energy, assess power quality technologies that might impact our customers, investigate environmental mitigation strategies for generation equipment, and develop methodologies and systems to assess the impact of intermittent generation technologies on the utility grid. EPRI funds have also been used to evaluate and/or demonstrate alternative energy technologies such as microturbines, broadband over power lines, combined heat and power, photovoltaics, solar thermal energy, in-line hydroelectric systems, biofuels, and wave energy devices. Additionally, EPRI personnel have made presentations to HECO on topics such as plant maintenance, advanced photovoltaics, and power quality, and HECO personnel have acquired valuable knowledge by attending EPRI-sponsored meetings and conferences.

Q. What is the value of research conducted by EPRI?

A. Typically, the reports on results of EPRI research cost non-EPRI members anywhere from a thousand to tens of thousands of dollars per report. EPRI produces hundreds of reports, technical papers, and other products each year. A license to non-EPRI members for EPRI software costs tens of thousands of dollars. An EPRI member company pays no additional fees for EPRI reports or rights to software. In addition, the EPRI funds for HECO-related projects have directly benefited the Company by increasing its knowledge base and experience in advanced technologies.

Q. Please summarize the benefits derived from HECO's membership in EPRI.

A. HECO has been able to greatly maximize its research and development dollars through its membership in EPRI. As an EPRI member, HECO is eligible to receive results of research and development funded by other EPRI members. These results would not be available to HECO without a membership in EPRI.

Research and Development Long-Term Strategies

Q. What is the Company's test year 2007 estimate for research and development long-term strategies?

A. The Company's test year 2007 estimate for research and development long-term strategies is $456,000, as shown on page 2 of HECO-1304, which mostly consists of the estimated costs for the Electrical System Analysis Study of $443,000.

Q. How was the test year 2007 amount determined?

A. The test year 2007 estimate for research and development long-term strategies was based on a vendor's preliminary cost estimate of the Company's Electrical System

Analysis Study, which is expected to commence and finish in 2007.

Q. What is the Electrical System Analysis Study?

A. The Electrical System Analysis Study is a research and development project to characterize, evaluate and formulate controls, storage and interconnections recommendations in order to increase the Company's renewable energy output. The Electrical System Analysis Study will utilize the MECO system.

Q. Why is the Electric System Analysis study needed?

A. The Electrical System Analysis study is needed to address the challenges of integrating renewable energy resources to the Company's electrical grid. With the recent commercial operation of the state's largest wind farm, Kaheawa 30MW in June 2006, MECO has faced challenges in integrating this large wind farm on the MECO grid. The increasing content of renewable energy resources on Maui is creating regulation, load following, dispatch and unit commitment challenges to the operation of the MECO grid.

Q. What is the objective of the Electrical System Analysis study?

A. The primary objective of this study is to address potential similar issues with future wind farms (and other renewable resources) primarily at HECO but as well as HELCO and MECO. Since MECO's system will serve as the subject of this analysis, the proposed effort will also look to characterize the challenges today, evaluate the impact of currently planned renewable expansion scenarios on MECO's grid operation, and formulate controls, storage and interconnection recommendations to help achieve the renewable energy targets for the island.

Q. What is the general work scope of the Electrical System Analysis study?

A. This general work scope will evaluate:

- The impact of the current penetration of wind on the Maui grid.

- The utilization of the results of the Electronic Shock Absorber ("ESA") technology (obtained from the ESA's trial run at HELCO prior to sustaining damage from the October 15, 2006 earthquakes) to address the effect of wind variability on grid frequency.
- The impact of additional wind capacity, as planned by other wind developers, and associated pumped hydro storage projects on the MECO grid.
- The impact of significant distributed renewable energy (photovoltaic) resources.

Q. How do HECO and its customers benefit from an Electric System Analysis study that will be performed on MECO's system?

A. The objectives and results of this study will have Company-wide benefits as other renewable energy projects are proposed on each island. HECO chose to perform this study on the MECO electrical system primarily due to the installation of a large wind farm on Maui.

Q. Is MECO providing cost-share in this study?

A. Yes. MECO's cost-share in this project will be in-kind as the technical lead, coordinating and collaborating with consultants and utility engineers in the various work activities. In addition, MECO personnel will be collecting and disseminating a multitude of data requirements for this study. The data to be collected are related to load flow and stability, historical performance, peak load, energy forecast, fuel price forecasts, thermal unit, operational constraints, renewable energy, and other related information.

Q. What is the status of this study?

A. The consultant is currently developing the final statement of work contract. HECO anticipates executing a contract and commencing the project in late 2006 or early 2007. The project study is estimated to be take about 8 months to complete.

Q In general, how do HECO and its customers benefit from the research and development long-term strategic activities?

A. Research and development long-term strategic funds are directed to a wide-range of activities that have direct impact in Hawaii. For example, there is strong public interest to increase renewable energy development in Hawaii, as evidenced by the actions of the State's Legislature in amending the renewable portfolio standards law in 2004 and 2006. Therefore, the Company plans to direct research and development long-term strategic funds to activities which further the development of renewable energy in Hawaii as well as other strategic areas.

2) Develop and Demonstrate New Technology

Q. What is the Company's test year 2007 estimate for develop and demonstrate new technology?

A. The test year 2007 estimate for develop and demonstrate new technology is $527,000. The Company's Advanced Metering Infrastructure ("AMI") project comprises approximately $516,000 of the test year estimate and represents the second year of a 3-year project currently estimated at $1.7 million.

Q. What types of expenses are included in the Company's test year estimate for developing and demonstrating new technology?

A. In general, included are expenses to recommend, implement, demonstrate, monitor and evaluate new technologies. The test year 2007 estimate for the AMI project includes labor costs, consultant fees, wireless meters, networking fees and licensing fees.

Q. What is the Company's Advanced Metering Infrastructure project?

A. The Advanced Metering Infrastructure ("AMI") project is a continuation of the Company's 2005 research and development project, "New Communications

Technology for Advanced Meter and Customer Detection Outage Study" which was completed in 2006. The AMI project is intended to further develop and demonstrate,,through a field pilot, a variety of two-way communication advanced metering solutions with the potential to satisfy Automatic Meter Reading ("AMR"), Time of Use ("ToU"), and Demand Response utility requirements. The objectives of the project are:

- Select a viable two-way advanced metering communications solution(s) to pilot in the Company's service area;
- Demonstrate, through a pilot of the chosen solution(s), the utility applications benefits of AMR, ToU, and Demand Response;
- Research and demonstrate the interoperability of a hybrid deployment of Advance Metering communication technologies within our service areas in support of utility applications;
- Evaluate and demonstrate the software integration efforts required to interface with the existing/future Customer Information System ("CIS") and Outage Management System ("OMS");
- Produce a Business Case Analysis and a Pilot Results Study report to document findings and results; and
- Assess the feasibility of a future scalable deployment of such a solution in support of the new Energy Policy Act of 2005.

Q. How does the Company plan on meeting the AMI project objectives?

A. The AMI project objectives will be met by the completion of the following activities over a three year period, ending 2008. During this period, the Company intends to:

- Deploy (pilot) in a controlled and scalable fashion, 500 (minimum) residential wireless meters across the Oahu service area for a period of 6 to 24 months;

- Pilot/test reliable connectivity to end points through a third party wireless network;
- Pilot data server(s) and related software that will communicate daily with all the devices, through a third party wireless network and collect 15 minute interval data to include kWh, voltage, diagnostics, and outage information at customers' premises; and
- Pilot back-end meter data management software to enable the evaluation of meter data integration efforts with the CIS and OMS.

Q. In summary, what is (are) the requirement(s) of the Energy Policy Act of 2005 of which the AMI project is intended to support/address?

A. The Energy Policy Act of 2005 requires individual state commissions to consider and determine whether or not it is appropriate for electric utilities to be required to offer, and to provide upon customer request, a time-based rate schedule that enables the customer to manage energy costs through advanced metering and communications technology. If the federal standard is adopted, the Company would be required to install, upon customer request, time-based meters and communications devices in order for customers to participate in time-based pricing and demand response programs.

Q. In summary, how will HECO and its customers benefit from the AMI project?

A. The combination of the AMI Business Case Analysis and the Pilot Results Study will provide first hand data to enable HECO to identify the trade-offs and operational savings potential of advanced metering if such a technology were to be deployed full scale across HECO's service area. The AMI project will also provide data on technical adequacy, reliability and flexibility of viable solutions. Further, the AMI project will provide data on outage management efficiencies as well as customer satisfaction benefits that could potentially be achieved with a full deployment and integration of advanced metering with billing and outage management systems.

Q. How was the test year estimate determined?

A. The Company based its project estimates on anticipated labor resources assigned to the project within the Company and on estimated costs to deploy the wireless meters to be piloted, including costs of various vendors used in the pilots.

<u>3) Community Service Activities</u>

Q. What is the Company's test year 2007 estimate for community service activities?

A. The test year 2007 estimate for community service activities is $280,000, after a downward issue simplification adjustment of $5,000, as shown on page 3 of HECO-1304.

Q. Why did the Company make the issue simplification adjustments?

A. To reduce the number of issues in this case, HECO has removed from its test year 2007 estimate the expense items that were disallowed by the Commission in Docket Nos. 6531 and 6998, HECO's test year 1990 and 1992 rate cases, respectively. The calculation of the total issue simplification adjustment amount is shown on page 3 of HECO-1304. The adjustment is for the cost items related to Aloha United Way and Community Action Group activities.

Q. What types of costs are included in the community service activities test year 2007 estimate?

A. The test year 2007 estimate includes the costs incurred by HECO in support of community services and activities. Specifically, HECO participates in education programs such as summer internships, school repair and renovation projects, native

Hawaiian planting projects, school presentations, and presidential awards. HECO also provides information and assistance to civic groups, businesses and the general public. Examples of community activities include the Arbor Day and McGruff programs. Additionally, through the Company's Speakers' Bureau program, Company employees make presentations to requesting organizations on various subjects related to the electric utility business. Subject matters include energy management, environmental concerns and electrical safety.

Q. How was the test year estimate determined?

A. The Company examined prior years' recorded information for recurring community service activities as a basis for determining the test year estimate and estimates of work scope for new community service activities.

4) Company Memberships Dues

Q. What is the test year 2007 estimate for Company membership expenses?

A. The test year 2007 estimate for Company membership expenses is $276,000 after a net downward issue simplification adjustment to the O&M Expense Budget of $87,000, as shown on page 5 at HECO-1304.

Q. Why was the issue simplification adjustment made?

A. The Company removed from its test year 2007 estimate the portion of Edison Electric Institute ("EEI") dues that the Commission excluded from test year expenses in previous rate cases, including Docket No. 7766. The exclusion was for the estimated portion of the Company's EEI dues related to government lobbying.

Q. What costs are included in the Company's membership expenses?

A. The Company's membership expenses include the costs of Company memberships in industrial, service, trade and technical organizations. The largest cost item is for the Company's membership in EEI of $198,000 (after adjustment), as shown on page 4 at HECO-1304, the industry's trade organization. The remaining test year estimate amount of $78,000 represents the cost of Company memberships in professional and other types of organizations whose activities relate to the functions performed by Company employees.

Q. How was the test year 2007 EEI dues estimate determined?

A. The amount of EEI dues was first calculated using the dues formula established by EEI. In accordance with the Commission's previous rate decisions, the formula amount was then adjusted to exclude the portion of the dues estimated to be in support of government lobbying. The EEI dues calculation is shown on page 5 of HECO-1304.

Q. What is the dues formula established by EEI?

A. Dues for a given year are based on the Company's recorded average number of customers and total electric revenues for the year preceding the prior year and owned generating capacity as of September 1 of the prior year, each multiplied by its related dues rate established each year by EEI.

Q. How did the Company calculate the exclusion of the portion of estimated 2007 EEI dues attributable to government lobbying?

A. The Company calculated the exclusion based on EEI's estimate of the government lobbying activities per the 2006 membership dues invoice. See pages 6 - 8 of HECO-1304 for a copy of the invoice for 2006 membership dues.

Q. How do HECO and its customers benefit from HECO's membership in EEI?

A. Some of the more significant benefits are as follows:

1) EEI membership provides an ongoing forum through which Company personnel share information with their counterparts at other electric utility companies. Among other things, this exchange of information and ideas helps

the Company find better overall solutions to its problems at lower costs than would otherwise be the case; and

2) The many ongoing EEI services provide information which helps member companies save costs. For example, there are reports on electrical system and equipment failures which alert companies to potential problems with particular equipment.

EEI serves as a liaison between the industry and the federal government, which allows the Company to indirectly voice its opinion on matters it would probably not otherwise have had a chance to address.

Q. Was HECO a member of EEI in 2006?

A. Yes. Although HECO was a member of EEI in 2006, EEI waived its 2006 membership fees for HECO.

Q. Why did EEI waive is 2006 membership fees for HECO?

A. HECO originally notified EEI that it would not renew its membership for 2006 due to budgetary reasons. However, EEI chose to waive its 2006 membership fees in order to avoid any disruption that would have been caused by HECO dropping its membership in 2006.

Q. How was the cost of Company memberships in professional and other types of organizations determined?

A. The Company examined prior years' recorded information as a basis for determining the test year estimate.

5) Ellipse Software Maintenance Fees

Q. What is HECO's test year 2007 estimate of the Ellipse software maintenance fee?

A. HECO's test year 2007 estimate of the Ellipse software maintenance fee allocable to Account 9302 is $162,000 as shown on page 10 of HECO-1304. HECO's company-wide share of the Ellipse software maintenance fee is $285,000. (See HECO-1304, page 9.)

Q. What costs are included in HECO's test year 2007 estimate of the Ellipse software maintenance fee?

A. The test year 2007 estimate of the Ellipse software maintenance fee includes three components:

1) Annual Ellipse software (Company's core business software) maintenance fee of $237,000;
2) Annual BSI software (Company's payroll tax software) maintenance fee of $15,000;
3) Amortization of the $1.1 million fee payable under Amendment No. 17 to the Software License Agreement No. NA099601 ("Amendment").

Q. What is the $1.1 million fee payable under the Amendment?

A. This fee was paid under an Amendment to the Mincom (Mincom is the Company's Ellipse software vendor) software agreement, which allowed the Company to reduce its future software maintenance (effective June 2004) with two payments of $550,000 in June 2004 and January 2005, totaling $1.1 million.

Q. How did the Company record the $1.1 million fee?

A. The Company recorded the fee as a prepaid expense. The $1.1 million prepaid expense was originally planned to be amortized evenly over the two-year payback period (i.e. the estimated amount of time for the Company to recover the $1.1 million fee), which would have run from June 2004 through May 2006. However, the amortization rate was revised in accordance with the Stipulated Settlement Letter which was accepted by the Hawaii Public Utilities Commission for the purposes of the Interim Decision and Order No. 22050, issued September 27, 2005.

Q. How were the estimates computed?

A. The total estimates for HECO, HELCO and MECO amounted to $407,000, and were computed as follows:

1) The estimated 2007 Ellipse and BSI software maintenance fees were based on actual 2006 costs with an escalation factor applied to the costs, as shown on page 9 of HECO-1304 amounting to $252,000.

2) The amortization of the $1.1 million fee was based on the amortization rate reflected in the Stipulated Settlement Letter, noted above, amounting to $155,000.

Next, a portion of the total estimated fees were then allocated to HECO, HELCO and MECO, based on the proportionate number of users at each respective Company, as shown on page 9 at HECO-1304. HECO's share of the software maintenance expense, amounting to $285,000, was then allocated to A&G (accounts 921 and 9302) and Transmission, Distribution and Production expense accounts, as shown on page 10, HECO-1304.

6) Miscellaneous

Q. What is the Company's 2007 estimate of miscellaneous expenses?

A. The Company's 2007 estimate of miscellaneous expenses is $6,000 as shown on page 1 of HECO-1304. Included in this amount are the on-costs of activities engaged in to maintain relations with the HECO Board of Directors and investors.

Account 931 – Rent Expense

Q. What is the Company's test year 2007 estimate for account 931 – Rent Expense?

A. The test year 2007 estimate for account 931 – Rent Expense is $2,757,000, as shown in page 1 of HECO-1305.

Q. What is included in the Company's test year 2007 estimate for account 931?

A. Account 931 includes the lease rental expense for office space in Central Pacific Plaza ("CPP"), the King Street building, Pauahi Tower, Waterhouse Building, Honolulu Club, and American Savings Bank ("ASB") Tower, and related common area maintenance expenses, general excise taxes and the annual real property tax credits, where applicable. Additionally, it includes the lease rental expense for the South Street employee parking lot and the Waiau Viaduct space.

The breakdown for the 2007 test year estimate for account 931 is summarized below and is also shown in HECO-1305.

Existing Leases	$ in Thousands
Central Pacific Plaza	$ 1,114
King Street Gross Rent	807
Pauahi Tower 5th Floor	439
Waterhouse Building	126
ASB Tower 8th Floor	104
Honolulu Club	78
South Street employee parking lot	57
Waiau Viaduct	32
TOTAL	$ 2,757

Q. How did HECO determine the 2007 test year estimate for rent expense?

A. The 2007 test year estimate was prepared based on present and estimated new leases for office space in CPP, the King Street office building, ASB Tower, Pauahi Tower, Waterhouse Building, and Honolulu Club, as well as the lease for the South Street employee parking lot and Waiau Viaduct space.

Q. How does the test year 2007 estimate compare with the 2005 recorded amount?

A. The test year 2007 estimate is approximately $555,000 higher than the 2005 recorded amount primarily due to:

1) approximately $135,000 primarily related to recording January 2005 CPP payments in December 2004 and miscellaneous rent adjustments for the CPP office leases in 2005;
2) approximately $108,000 of HEI rent received for the King Street office building, which was recorded to this account in 2005 but is now recorded as revenues in NARUC account 454, "Rent from Electric Property";
3) approximately $64,000 related to the timing of lease commencement of new office leases in the Waterhouse building in 2005 and 2006;
4) approximately $65,000 related to the timing of lease commencement of the Pauahi Tower 5th floor office lease in 2005;
5) approximately $38,000 related to HECO's South Street employee parking lot rent, which commenced in September 2005;
6) approximately $47,000 related to shared rent expenses for the conference/training rooms located on the 8th floor of ASB Tower; and
7) approximately $98,000 related to other miscellaneous costs, including general escalation of existing lease rents.

Q. Please discuss the test year estimate of $47,000 rent expense related to the conference/training rooms located on the 8th floor of ASB Tower.

A. HECO currently utilizes HEI's conference/training rooms on the 8th floor of the ASB Tower for department, management, and various business reasons. Although HEI has not directly charged HECO for the use of these rooms in the past, HECO, ASB and HEI will equally share in the costs of using these conference/training rooms. The $47,000 in the test year represents the estimated allocated base rental cost, including an allocation of common area costs, of HEI's 8th floor lease with

ASB, shared evenly among HECO, ASB and HEI.

Q. When does HEI plan to start charging HECO for its use of the conference/training rooms on the 8th floor of the ASB Tower?

A. HEI plans to start charging HECO for the use of the conference/training rooms in December 2006 using a cost sharing methodology as described above.

Q. How does this cost sharing methodology compare with what HECO would have been charged in 2006 if HEI charged HECO its market rental rates?

A. Based on HECO's actual 2006 usage of the 8th floor conference rooms at ASB Tower, and HEI's market rental rates of those conference/training rooms, HECO would have been charged approximately $65,000.

Q. Why does the Company require office space in the Waterhouse building?

A. The Company leases office space in the Waterhouse building, which is currently being used for temporary office space, training and conference rooms, and temporary storage of furniture and fixtures. Classrooms A and B and the adjacent office trailers, which are located at the Ward Avenue facility, are scheduled to be retired in 2007 and will not be replaced (the lot will be used for additional utility vehicle parking.) Therefore, the Company will use the office space in the Waterhouse building to temporarily serve as a replacement for Classrooms A and B, especially with upcoming training sessions to be held during and after the scheduled installations of the new Outage Management System and Customer Information System over the next several years. The temporarily stored furniture and fixtures, which were obtained as a result of the recently completed Ward Air Conditioner project, will be used to furnish new office trailers at Waiau and Kahe power plants.

Q. How does the Company record HEI's portion of the King Street office building rent in the test year 2007 rate case?

A. Previously, the Company recorded HEI's portion of the King Street office building rent payment as an offset to its rent expense in NARUC account 931. However, beginning May 2005, the Company records HEI's King Street lease payment as miscellaneous revenues in NARUC account 454, "Rent from Electric Property."

Q. Why did the Company change its method of recording HEI's portion of the King Street office building rent?

A. The Company changed the way it records HEI's portion of the King Street office building rent to conform to NARUC's Uniform System of Accounts definition of costs that should be recorded to account 454. In summary and as defined in account 454, rents received for the use by others of land, buildings, and other property devoted to electric operations by the utility should be recorded to account 454. Further, from an administrative standpoint, since the rent payment from HEI for office space in the King St. building is subject to PSC tax and PUC fees, it was more appropriate to record the rent payment from HEI as revenues and to a NARUC account that is subject to PSC tax and PUC fees.

<u>Account 932 - Maintenance of General Plant</u>

Q. What is the Company's test year 2007 estimate for account 932 - maintenance of general plant?

A. The test year 2007 estimate for account 932 - Maintenance of General Plant is $1,102,000, after a downward normalization adjustment of $382,000, as shown on HECO-1306.

Q. Why did the Company make the normalization adjustment?

A. The normalization adjustment was intended to make the test year estimates of non-recurring projects more representative of a normal level of non-recurring projects expected in future years. The normalization adjustment was made by including one-half of the total non-recurring costs of $764,000 in the test year expenses.

Q. What types of costs are included in this account?

A. Account 932 includes the expense of maintaining property assigned to the Customer Accounts, Customer Services, and Administrative and General functions of the Company. Examples of such costs include structural maintenance and repairs to the Company's Ward Avenue employee parking structure, King Street office building, rearranging and changing the location of office furniture and equipment, and maintenance contracts on office equipment.

Q. How was the test year estimate determined?

A. The Company determined the routine, ongoing costs incurred in the past to maintain the general plant items and also determined the repairs and preventive maintenance costs associated with improvement projects on the employee parking structure at the Ward Avenue facility.

Q. What is the reason for the increase in account 932 costs between 2005 and the test year 2007?

A. The increase from 2005 is largely the result of: 1) the recordation of approximately $154,000 of budgeted office equipment maintenance costs in the test year 2007 which, in previous years, were allocated and recorded to specific administrative and general departments (e.g., Accounting and Finance), based on the number of desktop computers within each department; and 2) specific repair and preventive maintenance projects in the test year 2007, related to the employee parking structure at the Ward Avenue Facility. See HECO-1307 for more information on certain specific preventive maintenance projects.

Q. Why did the Company change its method of recording office equipment maintenance?

A. The Company changed the way it records office equipment maintenance costs to conform to NARUC's Uniform System of Accounts definition of costs that should be recorded to Account 932. In summary and as defined in Account 932, maintenance costs of office furniture and equipment of customer accounts, sales and administrative and general departments should be recorded to Account 932, whereas maintenance costs of office furniture and equipment used elsewhere should be charged to the respective operational department's expense account.

Q. How do the office equipment maintenance costs of the test year 2007 estimate compare with the 2005 recorded amounts?

A. The test year 2007 estimate of $154,000 is comparable to what was recorded in 2005, although the office equipment maintenance costs were not recorded in Account 932.

Q. Why does the Company have a significant amount of non-recurring improvement projects budgeted in the test year 2007 estimate?

A. HECO has budgeted four non-recurring preventive maintenance projects relating to the Ward Avenue parking structure, totaling $764,000. The Company had originally intended to complete some of these projects in prior years, however due to budget constraints, these projects were deferred to future years. It is possible that not all of these projects will be done in 2007, therefore only one-half of the total costs of these projects were included in the test year, resulting in a normalization adjustment of $382,000.

Q. Does HECO anticipate more specific repair and maintenance projects beyond the test year 2007?

A. Yes. HECO anticipates a similar amount of specific repair and maintenance projects in future years as the Ward Avenue facilities become older and as repairs and preventive maintenance projects become more urgent.

DEPRECIATION

Q. What items will you cover in your depreciation testimony?

A. My depreciation testimony will address two items. First, I will discuss depreciation expense, which is an operating expense deducted from operating income in the calculation of net operating income for the test year. Second, I will discuss accumulated depreciation, which is the cumulative total of depreciation recorded with adjustments for retired assets. Accumulated depreciation is deducted from the original cost of plant-in-service in determining the depreciated plant-in-service amount used in calculating rate base.

Depreciation Expense

Q. What is the Company's test year 2007 estimate for depreciation expense?

A. The test year 2007 estimate for depreciation expense is $79,736,000, as shown in HECO-1308.

Q. How was the test year 2007 depreciation expense calculated?

A. Depreciation expense was calculated by determining the test year depreciation accrual and then adjusting this amount for certain items.

Q. What adjustments are made to the depreciation accrual amount to determine depreciation expense?

A. Depreciation accrued on vehicles, amortization of Contributions in Aid of Construction ("CIAC"), amortization of federal investment tax credit and amortization of the net regulatory asset related to Statement of Financial Accounting Standards No. 109, which is discussed by Mr. Okada at HECO T-15, are subtracted from the resulting depreciation accrual, as shown in HECO-1308. The net amount after these four adjustments represents the test year 2007 depreciation expense.

Q. Why is the annual vehicle depreciation accrual subtracted from the total depreciation accrual in deriving the amount of depreciation expense included in operating expense?

A. The annual vehicle depreciation accrual is excluded because it is actually reflected in capital or operation ("O&M") costs. Because of the clearing process used in the accounting for projects and work for which the vehicles are used, vehicle depreciation is appropriately reflected in either the O&M expenses for particular O&M projects or in the subsequent depreciation expense of the assets resulting from the capital projects to which the vehicle depreciation is charged. Thus, it is necessary to exclude the vehicle depreciation accrual from the total depreciation accrual to avoid double-counting the expense.

Q. Why is the amortization of CIAC subtracted from the depreciation accrual?

A. The amortization of CIAC is subtracted from the depreciation accrual because CIAC represents funds provided by customers, rather than investors, and is therefore appropriate to exclude that portion of depreciation related to CIAC.

Q. Please describe the method used to derive the test year 2007 depreciation accrual.

A. HECO's depreciation accrual was calculated using depreciation rates as calculated utilizing the straight-line remaining life method and use of the vintage amortization accounting procedure for selected plant accounts.

Q. Were the depreciation rates and use of the vintage amortization accounting procedure for selected plant accounts approved by the Commission?

A. Yes. On March 1, 2004, HECO and the Consumer Advocate filed a Settlement Agreement for purposes of simplifying and expediting the proceeding with respect to HECO's request for commission approval to change its depreciation rates and approval of a procedure change to vintage amortization accounting for certain accounts. On September 3, 2004, the Commission issued Decision and Order No. 21331 for Docket No. 02-0391 which approved this Settlement Agreement.

Q. How are the depreciation rates applied in computing the test year 2007 depreciation expense?

A. The plant account balances that are subject to depreciation and vintage amortization accounting are separated. Depreciation rates are used to derive the composite book depreciation and amortization rates which are applied to each functional group's depreciable plant balance in computing the test year 2007 depreciation expense.

Composite rates were determined by calculating each group's depreciation accrual for 2006 and dividing it by the group's depreciable asset balance as of January 1, 2006. The 2006 depreciation accrual for each group was calculated by multiplying the depreciation rates for each account in the group by its respective depreciable asset balance as of January 1, 2006. See HECO-WP-1305.

Q. What are the "functional account groups"?

A. The functional account groups are made to segregate the utility plant along functional lines of use, as provided in the National Association of Regulatory Utility Commissioners' ("NARUC") Uniform System of Accounts and as subscribed to by the Hawaii Public Utilities Commission. The five functional groups are:

1) Production;
2) Transmission;
3) Distribution;
4) General; and
5) Vehicles.

Q. What was the next step in calculating the depreciation accrual?

A. The Company calculated the test year depreciation accrual by multiplying the composite book depreciation and amortization rate for each functional account group by the beginning-of-the-year test year 2007 depreciable base for each respective functional group. See HECO-WP-1301.

Q. How does the test year 2007 depreciation accrual compare with the actual amounts recorded in recent year?

A. As shown in HECO-1311, 2007 depreciation accrual as a percentage of plant has increased slightly in comparison to previous years (2005 to 2006). This is primarily due to higher asset additions to functional account groups with higher composite book depreciation rates in previous years.

Accumulated Depreciation

Q. What is the Company's test year 2007 estimate for accumulated depreciation?

A. The test year 2007 estimate for accumulated depreciation is $1,188,793,000 as shown in HECO-1309.

Q. How were the beginning and ending 2007 accumulated depreciation balances calculated?

A. The January 1, 2007 balance was calculated as follows:

1) Recorded accumulated depreciation balance at January 1, 2006;
2) Plus estimated depreciation accrual for 2006;
3) Plus estimated salvage value received for 2006 plant retirements;
4) Less estimated 2006 plant retirements; and
5) Less estimated cost of removal for 2006 plant retirements.

The December 31, 2007 balance was calculated in the same manner starting with an estimated beginning-of-the-year balance and utilizing 2007 estimates for the depreciation accrual, plant retirements and related salvage and cost of removal.

Q. How were the estimated plant retirements for 2006 and the test year 2007 calculated?

A. Retirements were estimated for 2006 and the test year 2007 by examining the historical ratio of actual retirements per functional group to plant balances for the last five years (2001-2005). The Company then calculated a five-year simple average ratio to determine the estimated retirements for 2006 and the test year 2007. 2006 and 2007 estimated retirements include retirement of vintage year amortizable plant balances.

Q. How were the cost of removal and salvage for plant retirements estimated for 2006 and the test year 2007?

A. The Company examined the historical ratio of actual cost of removal and salvage to plant retirements for the last five years (2001-2005). The Company calculated a five-year simple average ratio. This ratio was then multiplied by the estimated amount of retirements excluding retirement of vintage year amortizable plant balances for each year to determine the estimated amount of cost of removal and salvage. These calculations are shown on HECO-WP-1303

Q. Please describe the reclassification of cost of removal for financial reporting purposes.

A. Based on guidance received from the Securities and Exchange Commission staff in February 2004, beginning with financial statements for the year ended December 31, 2003, HECO began to reclassify, as a regulatory liability, the estimated portion of the depreciation expense calculation designed to recover future net salvage.

Q. What are the Company's estimated 2006 and test year 2007 balances for its regulatory liability for cost of removal accrual included in accumulated depreciation?

A. The amounts of the estimated reclassification from accumulated depreciation to regulatory liability for financial statement purposes are $23,703,000 and $24,974,000, for 2006 and 2007, respectively. These calculations are shown on HECO-WP-1304.

Q. What impact does this reclassification have on rate base?

A. The reclassification has no effect on rate base since both the accumulated depreciation and the regulatory liability are net against total plant-in-service. Refer to HECO-1702 for plant-in-service summary.

Q. Please describe the purpose of recognizing an asset retirement obligation ("ARO") for certain of the Company's assets.

A. In December 2005, HECO adopted the provisions of the Financial Accounting Standards Board ("FASB") Interpretation No. 47, "Accounting for Conditional Asset Retirement Obligation" ("FIN No. 47"). In summary, FIN No. 47 requires an entity to recognize legal obligations associated with the retirement of assets in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. Accordingly, an entity is required to recognize a liability for the fair value of a conditional asset retirement obligation if the fair value of the liability can be reasonably estimated.

Q. What are the Company's estimated 2006 and test year 2007 balances for its AROs?

A. The estimated ARO balances for estimated 2006 and test year 2007 are $102,000 and $100,000, respectively.

Q. What impact does the recognition of the Company's AROs have on rate base?

A. The recognition of the Company's ARO has no effect on rate base. In general, upon initial recordation of the ARO, the cost of the asset is increased by the amount of the

ARO. Rather than recording depreciation expense or accretion expense as the increased asset cost is depreciated or as the ARO increases, respectively, a regulatory asset is recorded. The net book value of the asset cost related to the ARO plus the regulatory asset related to the depreciation and accretion expense, net of the ARO sum to zero.

MISCELLANEOUS OTHER OPERATING REVENUES

Q. What are the accounts and test year 2007 estimates for the Miscellaneous Other Operating Revenues?

A. As shown in HECO-1312, the Miscellaneous Other Operating Revenues totaling $1,695,000 for the test year 2007 are as follows:

Acct No.	Description	$ in Thousands
414	Amortization of Deferred Gains	$ 507
454	Property Licenses and Leases	508
454	Parking Revenues	261
454	Telecom Rent	214
456	CSI Insurance Program	128
451/454/456	Other	77
	TOTAL	$ 1,695

Q. What is the nature of the revenues identified as Miscellaneous Other Operating Revenues?

A. These are additional operating revenues of the Company which are recorded separately from the Company's electric revenues and other operating revenues. The Company's electric revenues and other operating revenues are addressed by Mr. Peter Young and Mr. Darren Yamamoto at HECO T-3 and HECO T-8, respectively.

The Miscellaneous Other Operating Revenues discussed in this testimony are primarily captured in NARUC accounts No. 414, "Gains (Losses) from Disposition of Utility Property", account No. 454, "Rent from Electric Property", and account No. 456 "Other Electric Revenues." Also, temporary facilities program revenues and expenses which are recorded in NARUC account No. 451, "Miscellaneous Service Revenues," are also addressed in this testimony. The remaining revenue streams of account No. 451 are addressed in Mr. Darren Yamamoto's testimony at HECO T-8. I will discuss each revenue stream in detail below.

Account 414 – Amortization of Deferred Gains

Q. What is the Company's test year 2007 estimate for amortization of deferred gains?

A. The test year 2007 estimate of amortization of deferred gains is $507,000 as shown in HECO-1312.

Q. What is included in amortization of deferred gains?

A. Amortization of deferred gains represents the amortization of deferred gains from the Commission-approved sales of Company-owned property. In general, gains and losses from the sale of Company property are deferred and amortized over 5 years.

Q. Why does the Company amortize its deferred gains and losses from the sale of Company-owned property over five years?

A. By Decision and Order No. 6275, filed on July 9, 1980, in Docket No. 3705, the Commission adopted the method recommended by the Federal Energy Regulatory Commission with respect to the treatment of the gain from the sale of a utility's real property. This method treats the gain as a deferred credit that is amortized to operating income over a five-year period. In general, the Company has requested and the Commission has approved the use of this method for the treatment of gains and losses associated with sales of Company-owned property. References to the various Decision and Orders approving the sales are reflected in HECO-1312.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded amortization of deferred gains?

A. The amortization of deferred gains is higher than the amount recorded in 2005 by approximately $135,000, primarily due to increased deferred gains on additional sales of Company-owned property. Refer to Ms. Patsy Nanbu's testimony in HECO T-10 for more information on the gains from the sale of Company-owned property.

Account 454 – Property Licenses and Leases

Q. What is the Company's test year 2007 estimate for revenues from the Company's property licenses and leases?

A. The test year 2007 estimate for revenues from the Company's property licenses and leases is $508,000 as shown in HECO-1312.

Q. What is included in property licenses and leases revenues?

A. Included are: 1) rent from HEI for use of office space in the HECO building, 2) miscellaneous rent from various licenses and leases of the Company's land, and 3) revenues from the Hawaii Natural Energy Institute of the University of Hawaii for use of warehouse space at HECO's Ward Avenue facility.

Q. How was the test year 2007 estimate determined?

A. The 2007 test year estimate was prepared based on present licenses and leases of the Company's property, including estimates for renewals and terminations.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded property licenses and leases revenues?

A. The Company's property licenses and leases revenues are higher in the test year 2007 by approximately $60,000, primarily due to the net of: 1) an increase of

$94,000 related to the Company recording rent from HEI for the use of office space in the King Street building in NARUC account No. 454 (previously recorded to NARUC account No. 931, "Rent Expense") beginning May 2005, and therefore 2005 includes only 8 months of HEI rent, and 2) a decrease in revenues from the Company's property licenses and leases due to the timing of lease terminations expected in 2007, amounting to approximately $34,000.

Q. Why did the Company change its method of recording HEI's portion of the King Street office building rent?

A. As discussed earlier in my testimony, the Company changed the way it records HEI's portion of the King Street office building rent to conform to NARUC's Uniform System of Accounts definition of amounts that should be recorded to account No. 454. In summary, rents received for the use by others of land, buildings, and other property devoted to electric operations by the utility, should be recorded to account 454.

<u>Account 454 – Parking Revenues</u>

Q. What is the Company's test year 2007 estimate for parking revenues?

A. The test year 2007 estimate for parking revenues is $261,000 as shown in HECO-1312.

Q. What is included in parking revenues?

A. Parking revenues primarily represents revenues from employees for parking privileges at the Ward Avenue facility, Honolulu Power Plant, and at the South Street parking lots.

Q. How was the test year 2007 estimate determined?

A. The test year 2007 estimate is based on current number of employees paying for monthly parking privileges at the various locations as of September 2006.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded parking revenues?

A. The test year 2007 is comparable to the 2005 actual parking revenues.

Account 454 – Telecom Rent

Q. What is the Company's test year 2007 estimate for telecom rent revenues?

A. The test year 2007 estimate for telecom rent revenues is $214,000 as shown in HECO-1312.

Q. What is included in telecom rent revenues?

A. Telecom rent revenues are primarily rent revenues from telecommunication companies that attach communication equipment to the Company's electric poles and towers or place fiber optic cables in underground ducts, under the Company's Facilities Attachment Program. Under this program, companies are charged a monthly attachment fee pursuant to negotiated contracts with the Company that are approved by the Commission.

Q. How was the test year 2007 estimate determined?

A. The test year 2007 estimate was primarily based on prior year's recorded information, including expected reimbursable revenues from telecom carriers for work performed to evaluate pole attachment requests.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded telecom rent revenues?

A. The test year 2007 estimate is higher than actual 2005 revenues by approximately $37,000. The increase is primarily due to annual rent escalation and an increase in telecom carrier site agreements.

Account 456 – CSI Insurance Program

Q. What is the Company's test year 2007 estimate for CSI Insurance Program revenues?

A. The test year 2007 estimate for CSI Insurance Program revenues is $128,000 as shown in HECO-1312.

Q. What is the CSI Insurance Program?

A. The Company has an agreement with CSI (Central States Indemnity Co.), an insurance company based in Omaha, Nebraska, which allows CSI to solicit the Company's customers for enrollment in CSI's Insurance Program and to assist CSI with processing and administrative services in connection with CSI's Insurance Program. The insurance coverage offered includes disability insurance, involuntary unemployment insurance and family leave insurance, all intended to pay amounts owed to HECO by insured customers for services rendered.

Q. What do the CSI Insurance Program revenues represent?

A. Under the agreement, the Company is paid a processing and administrative services fee equal to 20% of the billed monthly premiums owed to CSI. Also, the Company and CSI equally share the CSI Program Insurance annual net revenues (total annual premiums net of the Company's 20% service fee, CSI's retention, claim payouts, general costs such as taxes, marketing and other fees and assessments, as defined in the agreement).

Q. How was the test year 2007 estimate determined?

A. The test year 2007 estimate is based on the sum of: 1) an annualized five-month average (9/05-1/06) of service fees, and 2) a five-year average (2001-2005) of equally shared profits.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded CSI Insurance Program revenues?

A. The test year 2007 estimate is approximately $57,000 higher than what was recorded under the CSI Insurance Program in 2005. The increase is primarily due to the timing of the receipt of the equally shared 2005 annual net revenues of approximately $75,000 in early 2006.

Accounts 451/454/456 – Other Miscellaneous Other Operating Revenues

Q. What is the Company's test year 2007 estimate for other miscellaneous other operating revenues?

A. The test year 2007 estimate for other miscellaneous other operating revenues is $77,000 as shown in HECO-1312.

Q. What is included in the test year 2007 other miscellaneous other operating revenues?

A. The test year 2007 estimate is primarily comprised of: 1) revenues from the reimbursement of minor or incidental engineering services provided to customers under the Company's Minor T&D Customer programs amounting to approximately $73,000, and 2) amortization of the Iolani Court Plaza lease premiums amounting to approximately $4,000. Ms. Patsy Nanbu's testimony at HECO T-10 discusses the Company's amortization of the Iolani Court Plaza lease premiums.

Q. How was the test year 2007 estimate determined?

A. The Company examined prior years' recorded information for miscellaneous incidental engineering services as a basis for determining the test year estimate.

Q. How does the test year 2007 estimate compare with the actual 2005 recorded revenues of other miscellaneous other operating revenues?

A. The test year 2007 estimate is higher than the 2005 actual recorded revenues by approximately $247,000. The increase is primarily attributable to the Company estimating a breakeven impact from its Temporary Facilities Program in 2007 as compared to 2005 when expenses exceeded reimbursements by approximately

$273,000. This 2005 amount was partially offset by eight months of Symphony Park parking lot related expenses amounting to approximately $32,000 which was previously accounted for in NARUC account No. 454, but beginning September 2005, was recorded in NARUC account No. 921. Ms. Patsy Nanbu's testimony in HECO T-10 discusses the NARUC account 921 expenses.

Q. What is the Temporary Facilities Program?

A. The Company's Temporary Facilities Program is intended to establish temporary electrical service to eligible applicants and under certain conditions pursuant to the Company's Temporary Service Rule No. 12 tariff.

Q. What steps have the Company taken to manage its Temporary Facilities Program to a breakeven situation in the test year 2007?

A. For typical temporary installations, the Company commenced more timely reviews and updates of the Company's costs and temporary fee revenues. For larger temporary installation projects, the Company added a 30% contingency to estimated costs (based on historical temporary service connection costs) to avoid cost recovery shortfalls.

SUMMARY

Q. Please summarize your testimony.

A. The test year 2007 normalized expenses and revenues which the Company has demonstrated to be fair and reasonable in this docket include the following:

Description	$ in Thousands
Miscellaneous A&G Expenses	$ 7,487
Depreciation Expense	$ 79,736
Miscellaneous Other Operating Revenues	$ 1,695

The Company's normalized 2007 test year estimates for the Miscellaneous Administrative and General Expense shown above cover a variety of expenses associated with the cost of doing business. The inclusion of these types of costs in the 2007 test year estimates is consistent with prior Commission decisions.

Q. Does this conclude your testimony?

A. Yes, it does.

BRUCE TAMASHIRO

EDUCATIONAL BACKGROUND AND EXPERIENCE

Present employer:	Hawaiian Electric Company, Inc. 900 Richards Street Honolulu, HI 96813
Current position:	Director, Corporate and Property Accounting
Previous position:	Senior Financial Analyst July 2001 - October 2004
Years of service:	5 years
Other experience:	Senior Auditor, KPMG LLP January 1994 – July 2001
Certification:	Certified Public Accountant (not in public practice) State of Hawaii
Education:	Bachelor of Business Administration in Accounting University of Hawaii at Manoa

Hawaiian Electric Company, Inc.
Miscellaneous Administrative and General Expenses
Test Year 2007 ($ in Thousands)

Line	Account	Notes	[A] 2007 Budget	[B] Budget Adj	[C] Norm	[A]+[B]+[C] 2007 Test Year Estimate
	928 Regulatory Commission Expense:					
1	Non-Labor	(1)	198	(198)	283	283
2	Total 928		198	(198)	283	283
	9301 Institutional/Goodwill Advertising Expense					
3	Labor		11	-	-	11
4	Non-Labor		19	-	-	19
5	Total 9301		30	-	-	30
	9302 Miscellaneous General Expenses					
6	Labor	(2)	365	(5)	-	360
7	Non-Labor	(3)	3,042	(87)	-	2,955
8	Total 9302		3,407	(92)	-	3,315
	931 Rents Expense					
9	Non-Labor	(4)	3,019	(262)	-	2,757
10	Total 931		3,019	(262)	-	2,757
	932 Administrative and General Maintenance					
11	Labor	(5)	176	-	(20)	156
12	Non-Labor	(5)	1,458	(150)	(362)	946
13	Total 932		1,634	(150)	(382)	1,102
	Total Misc Administrative and General Expenses		8,288	(702)	(99)	7,487

Note: Numbers may not total exactly due to rounding.

Note (1): Budget adjustment to exclude amortization of 2005 regulatory commission expenses. Normalization adjustment for 2007 regulatory commission expenses amortized over 3 years. (See HECO-1303.)

Note (2): Budget adjustment to remove costs for Aloha United Way and Community Action Group amounting to $5K. (See HECO-1304, page 3.)

Note (3): Budget adjustment to 1) remove portion of Edison Electric Institute dues attributed to government lobbying amounting to approximately $87K (See HECO-1304, page 5).

Note (4): Budget adjustment to include additions for 1) Waterhouse building Suite 506 lease ($53K), 2) ASB Tower 8th floor office lease ($57K), 3) ASB Tower 8th Floor training room allocated cost ($47K), and 4) South Street reclassification from NARUC 454 "Rent from Electric Property ($57K), net of deductions for 1) entire ASB Tower 8th floor lease (-$472K) and 2) misclassification of costs (-$4K). (See HECO-1305).

Note (5): Budget adjustment due to change in project scope for covered parking level project. (See HECO-1306). Normalization adjustment for Ward Parking Facility Improvement Projects. (See HECO-1306.)

Source:
HECO-WP-101(B), pages 15-16 for Column A, lines 1-13.

Hawaiian Electric Company, Inc.
Miscellaneous Administrative and General Expenses
2002 to Test Year 2007 Estimate ($ in Thousands)

		[A]	[B]	[C]	[D]	[E]	[F]	
		Recorded						
							Test Year	
						Forecast	Estimate	2005 vs.
Line	Account	2002	2003	2004	2005	2006	2007	2007
1	928 Regulatory Commission Expense	-	-	-	61	198	283	361%
2	9301 Institutional/Goodwill Advertising Expense	96	93	76	73	75	30	-59%
3	9302 Miscellaneous General Expenses	3,503	3,842	2,803	2,841	751	3,315	17%
4	931 Rents Expense	1,398	1,524	1,544	2,202	2,404	2,757	25%
5	932 Administrative and General Maintenance	684	496	505	524	520	1,102	110%
	Total	5,682	5,955	4,929	5,702	3,949	7,487	

Note: Numbers may not total exactly due to rounding.

Source:
Columns A to E, lines 1 to 5 - HECO-WP-101(B), pages 15-16.
Columns F, line 1 - HECO-1303.
Columns F, line 2 - HECO-WP-101(B), page 15.
Columns F, line 3 - HECO-1304.
Columns F, line 4 - HECO-1305.
Columns F, line 5 - HECO-1306.

Hawaiian Electric Company, Inc.
Account 928 - Regulatory Commission Expenses
Test Year 2007 Estimate ($ in Thousands)

Amortization of 2005 TY regulatory commission expenses				$	198	
Estimated budget adjustment - Note (1)					(198)	
Estimated 2007 TY Regulatory Commission Expenses:						
Legal fees	$	540				
Consultant - Regulatory Support		178				
Consultant - Return on equity		64				
Consultant - Act 162 - Note (3)		42				
Printing services		10				
Consultant - HEI impact (affidavit)		8				
Supplies		6				
Stenographer		1				
Total 2007 rate case expenses	$	849	[a]			
Amortization period in years - Note (2)		3	[b]			
Estimated amortization of 2007 regulatory commission expenses					283	[a]/[b]
Total 2007 Test Year Regulatory Commission Expenses				$	283	

Note: Numbers may not total exactly due to rounding.

Note (1): The estimated budget adjustment represents the write-off of the remaining unamortized 2005 test year regulatory commission expenses based on Commission ruling in its Decision and Order No. 12679 (Docket No. 7064), of East Honolulu Community Services, Inc.'s request for a general rate case.

Note (2): The 2007 test year regulatory commission expenses will be amortized over a 3-year period based on the Company's anticipated timing of rate case filings between the current test year 2007 rate case filing compared to its next rate case filing for an anticipated 2010 test year.

Note (3): Act 162 consultant costs are estimated to be $125,000 which will be shared by HECO, HELCO, and MECO evenly - $125,000/3.

Hawaiian Electric Company, Inc.
Account 9302 - Miscellaneous General Expenses
Test Year 2007 Estimate ($ in Thousands)

Research and Development	$	2,064
Develop and Demonstrate New Technology		527
Community Service Activities		280
Company Membership Dues		276
Ellipse Software Maintenance Fees		162
Other		6
Total 2007 Test Year Miscellaneous General Expenses	$	3,315

Note: Numbers may not total exactly due to rounding.

Hawaiian Electric Company, Inc.
Research and Development (R&D) Expenses
Test Year 2007 ($ in Thousands)

Total 2007 Test Year R&D Expenses:			
EPRI Dues - HECO's Portion			$ 1,608
Other Long-Term R&D Strategies			456
Total 2007 Test Year R&D Expenses			$ 2,064
EPRI Dues - HECO's Portion:			
Total 2005 EPRI Dues	Note (1)	$ 1,986	
Estimated Escalation Factor	Note (2)	5%	
Estimated 2007 EPRI Dues			$ 2,085
HECO's Portion	Note (3)		77.094%
Total Estimated EPRI Dues - HECO's Portion			$ 1,608

Note: Numbers may not total exactly due to rounding.

Note (1): Amount represents the annual EPRI membership dues according to the 3-year EPRI Membership Agreement between HECO and EPRI dated January 1, 2003, which expired on December 31, 2005.

Note (2): The escalation factor will be part of the current negotiations between EPRI and HECO for a five-year membership agreement with EPRI for calendar years 2007-2011. For the purposes of estimating the test year 2007 EPRI dues, the escalation factor was based on current negotiations with EPRI personnel on a new multi-year agreement.

Note (3): HECO's portion of the total EPRI dues is based on the below allocation:

HECO TY 1995 Docket No. 7766, D&O No. 14412	1,698	77.094%
HELCO TY 2000 Docket No. 99-0207, D&O No. 18365	270	12.254%
MECO TY 1999 Docket No. 97-0346, Amended D&O No. 16922	235	10.655%
Total	2,203	

Hawaiian Electric Company, Inc.
Community Service Activities
Test Year 2007 Estimate ($ in Thousands)

Total Community Service Activities	$	285
Aloha United Way & Community Action Group - Note (1)		5
Total 2007 Test Year Community Service Activities	$	280

Note: Numbers may not total exactly due to rounding.

Note (1): Costs of activities related to the Aloha United Way and Community Action Group activities are excluded as a simplification adjustment due to the Commission's disallowance of these costs in the Company's test year 1990 and 1992 rate cases (Dockets 6531 and 6998, respectively).

Hawaiian Electric Company, Inc.
Company Membership Expenses
Test Year 2007 Estimate ($ in Thousands)

Adjusted EEI Membership Dues			$	198
Other Dues:				
Chamber of Commerce of Hawaii	$	23		
Western Energy Institute		20		
Land Use Research Foundation		15		
Hawaii Employers Council		15		
Better Business Bureau		3		
Western Labor & Management Public Affairs Committee		2		
Total Other Dues				78
Total 2007 Test Year Company Membership Dues			$	276

Note: Numbers may not total exactly due to rounding.

Hawaiian Electric Company, Inc.
Estimated EEI Dues
Test Year 2007 Estimate

Customers					
2005 HECO per 12/31/05 FERC Form No. 1		290,038			
EEI Rate per Customer (see p. 7)	x	0.1895			
Total Customer Component				$ 54,962	
Electric Sales Revenues ($ in Thousands)					
2005 HECO Consol per 12/31/05 FERC Form No. 1		$ 1,801,709			
1st $1,000,000,000		$ 1,000,000			
Rate (see p. 7)	x	0.1548			
			$ 154,800		
2nd $1,000,000,000		$ 801,709			
Rate (see p. 7)	x	0.09324			
			74,751		
Total dues based on revenues			$ 229,551 [a]		
2005 HECO per 12/31/05 FERC Form No. 1		$ 1,204,219			
2005 HECO Consol per 12/31/05 FERC Form No. 1		$ 1,801,709			
Percent allocable to HECO			66.84% [b]		
Total Electric Sales Revenues Component				153,427	[a]x[b]
Generation-Owned Capacity- HECO					
As of December 31, 2005		1,263,000			
Rate (see p. 7)	x	0.028655			
Total Owned Generating Capacity Component				36,191	
Membership Dues for Regular Activities (see p. 6)				244,580	[c]
Industry Structure Assessment (see p. 6)			[c]x15%	36,687	[d]
Mutual Assistance Program - HECO only (see p. 6) ($5,000 per invoice for 2005 Membership Dues)			$5,000 x [b]	3,342	
Total EEI Membership Dues				284,609	
Less: Adjustment for government lobbying				(86,826)	*
ADJUSTED EEI DUES				$ 197,783	

* Government lobbying calculated as follows: =([c]x25%)+([d]x70%)
See p. 6 for support for percentages.

EEI EDISON ELECTRIC INSTITUTE

INVOICE FOR MEMBERSHIP DUES

701 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20004-2696
PHONE (202) 508-5000

Date	Invoice Number
08/23/2005	

MR. ROBERT F. CLARKE
CHAIRMAN, PRESIDENT AND CEO
HAWAIIAN ELECTRIC CO INC
PO BOX 730 SUITE 403
HONOLULU, HI 96808-0730

Payment Due upon Receipt

Description	Total
2006 Membership Dues for:	
Regular Activities of Edison Electric Institute[1]	$ 342,084
Industry Structure Assessment[2]	51,313
Mutual Assistance Program[3]	5,000
Total	$ 398,397

[1] Pursuant to OBRA, the portion of membership dues allocable during 2006 relating to influencing legislation not deductible for Federal Income Tax purposes is estimated to be 25%.

[2] The portion of the voluntary Industry Structure Assessment allocable during 2006 relating to influencing legislation is estimated to be 70%.

[3] Voluntary assessment approved by EEI Executive Committee relating to improvements for the rapid response to disasters. No portion of this assessment is allocable to influencing legislation.

PLEASE NOTE INFORMATION FOR WIRING.

The following is instruction for transferring funds electronically to Edison Electric Institute's account at the Wachovia Bank N.A. in Washington, DC:

Beneficiary's Bank:	**Wachovia Bank, N.A.**
Bank's Address:	**Washington, DC**
Bank's ABA Number:	**0 5 4 0 0 1 2 2 0**
Beneficiary:	**Edison Electric Institute**
Beneficiary's Acct No:	**2 0 0 0 0 1 3 8 4 2 8 9 7**
Beneficiary's Address:	**701 Pennsylvania Avenue, NW Washington, DC 20004-2696 USA**
Beneficiary Reference:	**2006 Membership Dues**

Please refer any questions to Ed Milad at: phone-(202) 508-5430; fax-(202) 508-5030; *or* e-mail-emilad@eei.org.

EDISON ELECTRIC INSTITUTE

2006 Allocation Factors

Membership dues are based on calculations using the member company's Average Number of Customers and Total Electric Revenue for the year 2004 and Owned Generating Capacity as of September 1, 2005. The sum of the three components' calculations is used in determining your 2006 Dues.

A. Member Companies

			Factors	
Customers:				
First	500,000	@	0.189500	Per customer
Next	1,200,000	@	0.088190	" "
Over	1,700,000	@	0.055990	" "
Plus				
Revenue:				
First	1,000,000,000	@	0.154800	Per thousand dollars
Next	2,000,000,000	@	0.093240	" " "
Over	3,000,000,000	@	0.069780	" " "
Plus				
Owned Generating Capacity:				
First	3,000,000	@	0.028655	Per kilowatt
Next	7,000,000	@	0.022790	" "
Over	10,000,000	@	0.009860	" "

Subject to the merger policy shown in the accompanying notes on the reverse side; a company system can combine the system's customers and revenues for dues purposes so long as these figures, as defined above, from all operating subsidiaries are included in the dues calculation.

B. Generating Companies Only

Revenue:				
First	1,000,000,000	@	0.077400	Per thousand dollars
Next	2,000,000,000	@	0.046620	" " "
Over	3,000,000,000	@	0.034890	" " "
Plus				
Owned Generating Capacity:				
First	3,000,000	@	0.028655	Per kilowatt
Next	7,000,000	@	0.022790	" "
Over	10,000,000	@	0.009860	" "

C. Transmission Companies Only

Revenue:				
First	1,000,000,000	@	0.077400	Per thousand dollars
Next	2,000,000,000	@	0.046620	" " "
Over	3,000,000,000	@	0.034890	" " "
Plus				
Year-end Owned/Leased Assets				
First	700,000,000	@	0.136870	Per thousand dollars
Next	2,100,000,000	@	0.062540	" " "
Over	2,800,000,000	@	0.039820	" " "

D. The minimum dues for a member company is $15,000.

(OVER)

Important Information

To fund the 2006 EEI Budget, dues for your company have been allocated based on calculations using the member company's Average Number of Customers, Revenue for the year 2004, and Owned Generating Capacity as of September 1, 2005. The sum of these three component calculations was used in determining your 2006 Dues

True-up Phase-in (2005-2008)

Each member's dues are calculated and charged based on their actual statistics. Since there is no overall increase in dues for 2006, any increase or decrease in dues is the result of the prior years' dues increase/decrease limits that are no longer applicable, or the result of changes in statistics. In 2005, members who had more than a 6% increase or decrease spread this change over 4 years. In 2006, those members who are still in the true-up phase, will continue to be phased in for up to the remaining three year period.

Mergers

In June 2000, the EEI Executive Committee adopted a policy for treatment of dues calculations for merging companies. The policy established a "phase-in" plan for the difference between the combined dues of the merging companies prior to the merger and the dues calculated per formula. This policy calls for a four year forward phase-in of the merger benefit, avoiding the immediate shift of dues obligations to other members.

Late Payment of Dues

All dues are due and payable on or before February 1, 2006. According to Board policy, payments received after February 1, 2006 will be charged interest equal to the average yield obtained by EEI on currently purchased short-term investments.

If you have any questions about your dues' calculations, please call Patric O'Kelley at (202) 508-5700.

Hawaiian Electric Company, Inc.
Ellipse Maintenance Fees
Test Year 2007 Estimate

Month	[a] MINCOM	[b] MINCOM Amend 22	[c] MINCOM Amend 23	[d] BSI	[e] MINCOM $1.1 Million Buy-Down Fee Amort	Sum of [a] to [e] Total (HECO/ HELCO/ MECO)	[f] 2007 Est Percent Increase
Jan-07	$ 16,645	$ 1,756	$ 1,069	$ 1,264	$ 17,187	$ 37,921	2.5%
Feb-07	16,645	1,756	1,069	1,264	17,187	37,921	
Mar-07	16,645	1,756	1,069	1,264	17,187	37,921	
Apr-07	16,645	1,756	1,069	1,264	17,187	37,921	
May-07	16,645	1,756	1,096	1,264	17,187	37,948	
Jun-07	17,061	1,756	1,096	1,264	17,187	38,364	
Jul-07	17,061	1,800	1,096	1,264	17,187	38,408	
Aug-07	17,061	1,800	1,096	1,264	17,187	38,408	
Sep-07	17,061	1,800	1,096	1,264	17,187	38,408	
Oct-07	17,061	1,800	1,096	1,264	-	21,221	
Nov-07	17,061	1,800	1,096	1,264	-	21,221	
Dec-07	17,061	1,800	1,096	1,264	-	21,221	

Total Ellipse Maintenance Fees	$ 406,883
HECO's % Share (Based on total users of HECO/HELCO/MECO)	70%
Total Test Year 2007 Estimated HECO's Share of Ellipse Maintenance Fees	$ 284,818

Note: Numbers may not total exactly due to rounding.

[a] January 2007 - May 2007 amounts based on actual monthly maintenance fee per invoice. Assumed a 2.5% increase beginning June 2007.

[b] January 2007 - June 2007 amounts based on actual monthly maintenance fee per invoice. Assumed a 2.5% increase beginning July 2007.

[c] January 2007 - April 2007 amount based on actual monthly maintenance fee per invoice. Assumed a 2.5% increase beginning May 2007.

[d] 2007 amounts based on 2006 annual maintenance fee per invoice. Assumed a 2.5% increase beginning January 2007.

[e] Based on agreed upon amortization, of the MINCOM buy-down fee, per the Stipulated Settlement Letter dated September 6, 2005 for HECO's 2005 TY rate case (Docket # 04-0113).

[f] Based on the estimated CPI for 2007 per the February 10, 2006 Blue Chip Economic Indicators Indicators report.

Hawaiian Electric Company, Inc.
Allocation of Ellipse Software Maintenance Fees
Test Year 2007 Estimate

		% Alloc	% Alloc	% Alloc	% Alloc	Result Alloc	Allocated Amount		NARUC Acct
	HECO's portion of Ellipse software maintenance fees per HECO-1304, pg. 9						$ 284,818		
	Work Management Amortization	0.1836							
	Capital Expenditures		0.559						
212	212 Constr Proj - Prod			0.072		0.007390	2,105		514
320	320 Manage Trans Construction Proj			0.214		0.021963	6,256		566
420	420 Manage Distri Construction Proj			0.714		0.073280	20,871		598
	Production		0.248						
	Prod Operation			0.475					
245	245 Monitor Plt Oper Perf - Boiler				0.546	0.011809	3,363		502
246	246 Monitor Plt Oper Perf - Turbo Gen				0.454	0.009819	2,797		505
	Prod Maint			0.525					
258	258 Maint Blr Plt & Rel Equip - Predictive				0.625	0.014940	4,255		512
261	261 Maint Stm Turbo Gen & Rel Equip Predictive				0.375	0.008964	2,553		513
	Transmission and Distribution		0.193						
	Transmission								
	Transmission Operation			0.147					
331	331 Oper Trans Fac - OH Line				0.492	0.002563	730		563
333	333 Oper Trans Fac - Substation				0.508	0.002646	754		562
	Transmission Maint								
343	343 Maint Trans OH Line - Predictive			0.145	0.682	0.003504	998		571
349	349 Maint Subst Trans Equip - Predictive				0.318	0.001634	465		570
	Distribution								
	Distribution Operation								
461	461 Oper Distri Fac - OH Line			0.313	0.309	0.003427	976		583
462	462 Oper Distri Fac - UG Line				0.341	0.003782	1,077		584
463	463 Oper Distri Fac - Substation				0.350	0.003882	1,106		582
	Distribution Maint								
474	474 Maint Distri OH Line - Predictive			0.395	0.437	0.006117	1,742		593
477	477 Maint Distri UG Line - Predictive				0.422	0.005907	1,682		594
486	486 Maint Subst Distrbution Equip - Predictive				0.141	0.001974	562		592
	Accounting/Finance	0.3757							
818	818 Maintain General Ledger, Subledgers, & Statistical Information					0.375700	107,006	[a]	9302
	HR/Payroll	0.2466							
766	766 Maintain Employee Records		0.031			0.007645	2,177		921
777	777 Process Payroll		0.969			0.238955	68,059		921
	Materials	0.1941							
842	842 Order Materials, Equip., Supplies		0.1			0.019410	5,528	[a]	9302
843	843 Process Invoice & Other Payments		0.649			0.125971	35,879	[a]	9302
850	850 Process Materials & Transaction		0.251			0.048719	13,876	[a]	9302
	TOTAL (HECO's portion of Ellipse software maintenance fees)						$ 284,818		
	Sum of [a] - Amt allocated to acct 9302						$ 162,289		

Hawaiian Electric Company, Inc.
Account 931 - Rent Expense
Test Year 2007 Estimate

EXISTING LEASES	[a] Sq Ft	[b] Monthly Rent per Sq Ft $	[c]=[a]x[b] Annual Base Rent (2)	[d]=[a]x note(1) Est Annual CAM (1)	[e]=[c]+[d] Annual Base & CAM Rent	[f]=[a]x note(1) Est RPT Credit (1)	[g]= ([e]+[f]) x (4.167%) Annual General Excise Tax	[h]=[e]+ [f]+[g] Annual Rent TY 2007 ($ 000s)
Central Pacific Plaza (CPP) Leases:								
Suite 700	7,598	$ 1.35	$ 123,468	$ 97,104	$ 220,571	$ (15,738)	$ 8,535	$ 213
Suite 1010	4,509	1.35	$ 73,271	57,626	130,897	(9,339)	5,065	127
Suite 1020/1025/1075	4,532	1.30	73,192	57,920	131,112	(9,387)	5,072	127
Suite 1201/1212 (3)	2,871	1.25	9,044	7,705	16,749	(1,249)	646	16
Suite 1201/1212 (RDLC/CIDLC) (3)	2,871	1.25	5,239	4,464	9,703	(723)	374	9
Suite 1250/1270 (3)	1,598	1.30	5,420	4,289	9,708	(695)	376	9
Suite 1250/1270 (RDLC/CIDLC) (3)	1,598	1.30	3,140	2,485	5,624	(403)	218	5
Suite 1300	9,601	1.35	158,897	122,702	281,599	(19,886)	10,906	273
Suite 1425	2,788	1.25	44,050	35,631	79,681	(5,775)	3,080	77
Suite 1480	1,242	1.35	20,183	15,873	36,055	(2,573)	1,395	35
Suite 1515	732	1.40	12,298	9,355	21,653	(1,516)	839	21
Suite 1520/1530	2,451	1.35	39,829	31,324	71,153	(5,077)	2,753	69
Suite 1570	2,969	1.40	49,879	37,944	87,824	(6,150)	3,403	85
HEI Sublease (4)	1,667	1.35	27,589	21,305	48,893	(3,453)	1,894	47
Total CPP								1,114
King Street Building	58,313	1.11	774,996	-	774,996	-	32,294	807
ASB Tower - 8th Floor	1,955	1.25	30,029	26,979	57,008	(2,229)	2,283	57
ASB Tower - Training Rooms	See calculation at Note (5)							47
Pauahi Tower - 5th Floor	15,892	1.25	238,380	219,310	457,690	(36,228)	17,562	439
Honolulu Club	2,544	2.45	74,794	-	74,794	-	3,117	78
South Street Parking Lot	See calculation at Note (6)							57
Waterhouse - Suite 506	3,085	0.80	29,616	24,063	53,679	(2,777)	2,121	53
Waterhouse - Suite 404	1,662	1.05	20,941	17,872	38,813	(2,992)	1,493	37
Waterhouse - Suite 101	1,806	0.97	21,022	16,320	37,342	(3,251)	1,421	36
Waiau Viaduct	Quarterly payments of $7,925 (no GET)							32
Total TY 2007 Rent								$ 2,757

Note Explanations:

Note: Numbers may not add exactly due to rounding.

(1) For CPP leases, estimated common area maintenance (CAM) costs and real property tax (RPT) credits were estimated based on actual 2006 figures as follows:

	CAM	RPT
CPP 2006 Actual Billings	$2,890,538	$ 482,525
Estimated Annual Increase (3%), RPT = none	1.03	1.00
Estimated CPP 2007 CAM/RPT	$2,977,254	$ 482,525
/ Total CPP Sq Ft (Common Interest)	232,959	232,959
/ 12 Months	12	12
Est Monthly 2007 $ per sq ft	$ 1.07	$ 0.17

For ASB Tower lease, CAM costs were estimated based on actual 2006 CAM billing rate of $1.12 per sq ft and escalated 3%. RPT estimated credit was based on actual 2006 rate of $.19 per sq ft with no escalation.

For Pauahi Tower lease, CAM costs were estimated based on actual 2006 CAM rate of $1.12 per sq ft and escalated 3%. RPT credit was estimated based on building management's estimated 2006 RPT of $.19 per sq ft with no escalation.

For Waterhouse leases, CAM costs were estimated based on actual 2006 CAM rate of $.87 per sq ft and escalated 3%. Note that for Suite 101 and 506, lessor is charging a reduced CAM ($.61 per sq ft until July 2007 for Suite 101 and $.65 per sq ft for Suite 506). RPT credit was estimated based on the building's RPT assessed values for 2006-07 ($.15 per sq ft).

For Honolulu Club lease, CAM and RPT credits are included in the base rent.

Hawaiian Electric Company, Inc.
Account 931 - Rent Expense
Test Year 2007 - Rent

Note Explanations Continued:

(2) Annual base rents are based on existing leases, except as adjusted based on lease terms and/or assumptions below:
Suite 700 - Lease expires 11/07. Assumed lease extended at $1.40 per sq ft beginning 12/07.
Suite 1010 - Per lease, base rent increases to $1.40 per sq ft beginning 12/07.
Suite 1020/1025/1075 - Per lease, base rent increases to $1.35 per sq ft beginning 2/07.
Suite 1250/1270 - Per lease, base rent increases to $1.35 per sq ft beginning 2/07.
Suite 1300 - Lease expires 5/07. Assumed lease extended at 1.40 per sq ft.
Suite 1480 - Per lease, base rent increases to $1.40 per sq ft beginning 12/07.
Suite 1425 - Per lease, base rent increases to $1.35 per sq ft beginning 5/07.
Suite 1520/1530 - Lease expires 11/07. Assumed lease extended at $1.40 per sq ft beginning 12/07.
Suite 1570 - Lease expires 11/06. Assumed lease extended at $1.40 per sq ft beginning 12/06.
HEI Sublease - Per lease, base rent increases to $1.40 per sq ft beginning 6/07.
ASB Tower - Per lease, base rent increases to $1.29 per sq ft beginning 4/07.

(3) CPP Suites 1201, 1212, 1250, and 1270 are occupied by the Company's DSM (19 individuals) and Pricing (5 individuals) divisions. Therefore, 21% of the lease rents of these suites are allocated to Acct 931, while the remaining 79% are allocated to the Company's 7 DSM programs. The 79% allocated to the DSM programs are further allocated to the individual programs based on the number of personnel working on each program. Of the 79%, 15.4% is allocated to the Residential Direct Load Control (RDLC) and Commercial and Industrial Direct Load Control (CIDLC) programs which are recorded in Acct 931 since the cost of these programs are recovered through base rates (per Stipulated Settlement Letter dated 9/16/05 between HECO, CA, and the DOD). Rent costs of the other DSM programs are recorded in Acct 910 "Customer Assistance Expenses" and are recovered through the DSM component of the IRP Clause.

(4) HEI Sublease is 39% of HEI's total lease agreement. As mentioned in note (2), monthly rent increases to 1.40 per sq ft beginning 6/07.

(5) HEI plans to allocate the cost of its trainings rooms (currently leased from ASB) located on the 8th floor of ASB Tower, evenly between HEI, HECO and ASB. HECO's share of the total estimated cost of the leased training rooms is calculated as follows:

ASB Tower 8th Floor Usage:			
HECO	1,955	12%	
HEI	9,328	59%	
Training Rooms 1 & 2	4,648	29%	
Total HEI leased square footage	15,931	100%	Per lease agreement.

	Per Month	Total 2007 (incl GET)	
Base rent per sq ft 1/07-3/07	$ 1.25	$ 62,231	Per lease agreement.
Base rent per sq ft 4/07-12/07	$ 1.29	$ 192,666	Per lease agreement.
Est CAM per sq ft	$ 1.15	$ 229,009	See Note (1) for CAM rate.
		$ 483,906	
TR1 & TR2 % interest		29%	
Total allocated portion		$ 141,183	
Divided by HEI/HECO/ASB		3	
Total allocated TR1&TR2 rent		$ 47,061	

(6) South Street parking lot is used by HECO employees and consultants. Total rent is calculated as follows:

Total monthly cost per stall	$ 115	2006 Actual
x Number of participants	40	Assumes no change in participants
x 12 months	12	
x 3% escalation	103%	
Total annual cost	56,856	

Hawaiian Electric Company, Inc.
Account 932 - Maintenance of General Plant
Test Year 2007 Estimate ($ in Thousands)

Annual Recurring Maintenance:						
Buildings and Grounds Maintenance				$	566	
Office Equipment Maintanence					154	
Ward Parking Facility Improvement Projects (Non-recurring):						
Roof Level Improvements	$	520				
Covered Level Improvements		255				
Stairwell Improvements		102				
Ramp Wall Repairs		37				
Total Ward Improvement Projects		914				
Less: Revised scope for Covered Level		(150)				
Total Ward Improvement Projects for Test Year	$	764	[a]			
Normalization period in years - Note (1)		2	[b]			
Total Normalized Ward Improvement Projects					382	[a]/[b]
Total 2007 Test Year Maintenance of General Plant				$	1,102	

Note: Numbers may not total exactly due to rounding.

Note (1): The normalization period applied to the Ward Parking Facility improvement projects is primarily based on a more reasonable level of non-recurring projects estimated to occur in the next several years.

Hawaiian Electric Company, Inc.
Miscellaneous General Expenses Variances by Account
(Over $200,000 and 10%)

Acct	Codeblock	2005 Recorded	2007 Test Year Estimate	Inc/(Dec)	% Inc/ (Dec)	Explanation
9302	P6V749PHENENPAVP6ZZ515	16,800	362,916	346,116	2,060	These costs are related to the Company's membership dues. The difference is primarily due to EEI waiving the Company's 2006 membership fees which would have been paid and recorded in 2006.
9302	P9S730PHENENPASVP7Z501	-	456,000	456,000	-	These costs are related to the Company's long-term research and development strategies which were recorded in NARUC account #921 in 2005.
9302	PWA730PHENEP0001059501	214,044	-	(214,044)	(100)	These costs are related to the Company's Broadband Over Powerlines project which is estimated to be completed in 2006.
9302	PWX731PHENEP0001320501	-	328,815	328,815	-	These costs are related to the Company's Automated Meter Infrastructure project which did not commence until after 2005.
931	PHA926OLPNENPHZZZZZ570	1,362,546	2,144,811	782,265	57	These costs are related to the Company's rent expenses. The difference is primarily due to the timing of rent payments in 2005, new leases in 2007 and miscellaneous rent adjustments, including rate escalations.
932	PHF932WRDNEP0001286501	-	250,000	250,000	-	These costs are related to the repair of concrete spalling on the mezzanine parking level of the Company's Facility Baseyard employee parking structure. The test year 2007 estimate has decreased by $150,000 due to a revised project scope, and is reflected as a budget adjustement at HECO-1301 and HECO-1306. This is a new non-recurring maintenance project in 2007.
932	PHF932WRDNEP0001291501	-	475,000	475,000	-	These costs are related to repair, maintenance, and improvement work on the roof parking level, including its existing lighting fixtures, of the Company's Ward facility employee parking structure. This is a new non-recurring maintenance project in 2007.

Hawaiian Electric Company, Inc.
Depreciation and Amortization Expense
For Years 2002 - 2007 ($ in Thousands)

Line		Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	(A) Estimate 2006	(B) Test Year Estimate 2007
1	Depreciation Accrual	72,262	75,603	78,314	79,826	84,358	89,797
2	Less: Depreciation on vehicles	(1,219)	(1,320)	(1,473)	(1,774)	(1,812)	(1,748)
3	Amortization of CIAC	(6,974)	(6,924)	(7,287)	(7,484)	(8,061)	(8,568)
4	Amortization of Federal ITC - Note (1)	(1,061)	(1,020)	(976)	(905)	(847)	(764)
5	Amortization of SFAS 109 reg asset- Note (1)	514	604	697	814	945	1,020
6	Depreciation Expense	63,522	66,943	69,275	70,477	74,583	79,736

Note (1): Amortization of Federal ITC is included in depreciation expense in accordance with the SFAS 109 method of accounting for income taxes as described in Mr. Lon Okada's testimony in HECO T-15.

Source:
HECO-1310 for Columns A & B, lines 1 and 2.
HECO-WP-1302 for Columns A & B, line 3.

Hawaiian Electric Company, Inc.
Accumulated Depreciation
For Years 2002 - 2007 ($ in Thousands)

Line		Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	(A) Estimate 2006	(B) Test Year Estimate 2007
1	Acc Dep Beg Bal at January 1	815,194	877,401	939,595	988,061	1,050,583	1,118,806
	Plus:						
2	Depreciation Accrual	72,262	75,603	78,314	79,826	84,358	89,797
3	Salvage	159	297	279	170	219	217
	Less:						
4	Retirements - Note (2)	(6,697)	(9,665)	(25,354)	(10,273)	(10,658)	(14,035)
5	Cost of Removal	(3,517)	(4,041)	(4,773)	(7,138)	(5,696)	(5,992)
6	Adjustments - Note (1)				(63)		
7	Acc Dep End Bal at December 31	877,401	939,595	988,061	1,050,583	1,118,806	1,188,793

Note (1): Reclassification of accumulated depreciation for E-business from utility to non-utility (approximately $74K, net) offset by entry to establish ARO accumulated depreciation (approximately $11K).

Note (2): Retirements for 2004 and 2005 include $15,707,000 and $2,471,000, respectively which represents retirements of assets subject to vintage amortization accounting. Also, 2005 includes transmission land retirements of $10,000.

Source:
HECO-WP-1301 for Columns A & B, lines 2 and 4.
HECO-WP-1303 for Columns A & B, lines 3 and 5.

Hawaiian Electric Company, Inc.
Depreciation and Amortization Accrual
2006-2007 ($ in Thousands)

Line	Plant Group	(A) Depreciable Plant at 1/1/06	(B) Composite Rate	(C) 2006 Dep Accr	(D) Depreciable Plant at 1/1/07	(E) Composite Rate	(F) 2007 Dep Accr
1	Production	529,205	1.7056%	9,026	556,413	1.7025%	9,473
2	Transmission	550,826	2.9704%	16,362	577,878	2.9704%	17,165
3	Distribution - Note (2)	1,052,118	4.3036%	45,279	1,106,528	4.3036%	47,621
4	General - Note (1)	139,610	8.5087%	11,879	172,568	7.9905%	13,789
5	Vehicles	24,924	7.2701%	1,812	24,054	7.2711%	1,749
6	TOTAL	2,296,683	3.6730%	84,358	2,437,441	3.6841%	89,797

Note (1): General 2006 Dep Accr includes depreciation of leasehold improvements of $37,000. Leasehold improvements are fully depreciated as of 12/31/06. Also, the depreciation accrual at 1/1/06 and 1/1/07 include net unrecovered amortization of $3,298,000.

Note (2): Distribution depreciable plant includes ARO asset amounting to $20,000 and $19,000 at 1/1/06 and 1/1/07, respectively.

Note (3): Note that the depreciable plant balances above exclude land.

Source:
See HECO-WP-1301 for Columns A, C, D and F.

Hawaiian Electric Company, Inc.
Summary of Plant Balances, Accumulated Depreciation
and Annual Dep and Amortization Accruals
For Years 2002 - 2007 ($ in Thousands)

Line	Year	[A] Dep Plant at Beg of Yr	[B] Depr Accrual Note (1)	[C]=[B]/[A] As % of Plant	[D] Acc Depr at Beg of Yr	[E]=[D]/[A] As % of Plant
1	2002	1,945,296	72,262	3.71%	815,194	41.91%
2	2003	2,024,963	75,603	3.73%	877,401	43.33%
3	2004	2,085,866	78,314	3.75%	939,595	45.05%
4	2005	2,204,392	79,826	3.62%	988,061	44.82%
5	2006	2,296,683	84,358	3.67%	1,050,583	45.74%
6	2007	2,437,441	89,797	3.68%	1,118,806	45.90%

Note (1): Includes amortization and depreciation on leasehold improvements and vehicles

Source:
HECO -WP-1301 for Columns A, B and D, lines 5 and 6.

Hawaiian Electric Company, Inc.
Miscellaneous Other Operating Revenues
Test Year 2007 ($ in Thousands)

			Test Year 2007
Property Sold:			
Queen Emma	Dkt 02-0098, D&O 19839	$ 280	
Iolani Court Plaza	Dkt 98-0170, D&O 16833	138	
Kuliouou	Dkt 98-0314, D&O 16935	40	
Waianae	Dkt 98-0314, D&O 16935	22	
Aiea Park Place - Note (1)	Dkt 2006-0323, D&O pending	18	
Palolo	Dkt 05-0280, D&O 22664	9	
Total Amortization of Deferred Gains			$ 507
Property Licenses and Leases:			
King Street building - HEI		$ 280	
Company-owned land - Various		196	
Ward Avenue warehouse - Hawaii Fuel Cell		32	
Total Property Licenses and Leases			508
Parking Revenue			261
Telecom Rent			214
Payment Protection Insurance			128
Other - Note (2)			77
Total Miscellaneous Other Operating Revenues			$ 1,695

Note: Totals may not add due to rounding.

Note (1): Sale is currently pending approval by the Commission in Docket No. 2006-0323. Assumes Commission approval is obtained and amortization commencing in May 2007.

Note (2): Includes amortization of Iolani Court lease premiums of approximately $4,000. Refer to Ms. Patsy Nanbu's testimony at HECO T-10 for discussion on the amortization of Iolani Court lease premiums.

TESTIMONY OF
FAYE CHIOGIOJI

MANAGER
WORKFORCE STAFFING AND DEVELOPMENT
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Employee Headcount

INTRODUCTION

Q. Please state your name and business address.

A. My name is Faye Chiogioji, and my business address is 220 South King Street, Suite 700, Honolulu, Hawaii, 96813.

Q. By whom are you employed and in what capacity?

A. I am the Manager of Workforce Staffing & Development for Hawaiian Electric Company, Inc. ("HECO"). My educational background and experience are shown in HECO-1400.

Q. What is your area of responsibility in this proceeding?

A. I am responsible for presenting the Company's total average number of employees for the test year 2007. In my testimony I will address staffing additions for the following areas:

1) President's Office (including Corporate Audit and Compliance);
2) Corporate Excellence;
3) Finance (except for General Accounting);
4) Legal;
5) Energy Solutions;
6) Public Affairs;
7) Corporate Relations; and
8) Government and Community Affairs.

I am also responsible for addressing the employee counts for the offices of the Vice President-Customer Solutions, Senior Vice President-Operations, Vice President-Energy Delivery, Vice President-Power Supply and Vice President-Special Projects.

Q. Who discusses the need for the additional employees in the other departments?

A. The following individual witnesses will address the estimated number of positions required by their departments in their respective testimonies:

1) P. Nanbu - General Accounting (HECO T-10);
2) A. Hee - Customer Solutions (HECO T-9);
3) D. Yamamoto - Customer Service (HECO T-8);
4) R. Young –Energy Delivery (HECO T-7); and
5) D. Giovanni - Power Supply (HECO T-6).

HECO-1401 lists the witnesses who are responsible for discussing employee counts for each respective department.

ORGANIZATION STRUCTURE

Q. What is the current HECO management organization structure, including reporting relationships among the departmental organizations?

A. The management organization chart in HECO-1402 shows the current HECO management organization structure and reporting relationships.

TOTAL AVERAGE NUMBER OF EMPLOYEES

Q. What is the Company's total average number of employees for the test year 2007?

A. The Company's test year 2007 average number of employees totals 1,548 as shown in HECO-1403. The average number of employees was determined for the period from January 1, 2007, through December 31, 2007 by summing the employee count estimated at the beginning of January and the total number of employees estimated at the end of each month in the test year, then dividing by 13 (HECO-WP-1401).

Q. How did you estimate the January 1, 2007, employee count?

A. In the test year, it is assumed that the same number of employee positions is in place from the first day of each month through the last day of the month. The January 1st employee count is identical to the employee count at the end of the month and is reflected twice in the calculation.

Q. Please define "number of employees."

A. The employee count includes regular, temporary and probationary employees, but excludes temporary agency help and other contractors hired on a contractual basis. For purposes of the rate case, it also excludes the employees whose labor expenses are recovered through the Demand-side Management ("DSM") adjustment surcharge. Further detail on the DSM adjustment may be found in Alan Hee's testimony at HECO T-9.

Q. How were the estimates of the number of employees developed?

A. The estimates were developed as part of the budgeting process. Generally, managers establish the personnel requirements for their organizations by first reviewing factors such as the planned workload (e.g., capital projects, non-capital projects, nonrecurring activities or normal day-to-day activities). This step helps to determine the labor "demand" that will be required to accomplish the work.

The manager also reviews what may occur within the existing workforce (e.g., anticipated retirements during the forecast period, in order to determine the supply of labor). When the labor demand exceeds the labor supply available, the individual work activities are prioritized and certain work is identified to be performed on an overtime basis, or contracted out, or performed by temporary personnel, or, in some cases, deferred. If the demands on existing staff are excessive, or if the additional workload is expected to be ongoing, additional staff may be hired.

Q. How does the test year average employee count of 1,548 compare to HECO's most recent actual employee count?

A. As shown in HECO-1403, the actual number of employees on HECO's payroll on

September 30, 2006, was 1,426. The 2007 average test year employee count represents an increase of 122 employees.

Q. Why does HECO require these additional employees?

A. As explained by the Operations and Maintenance ("O&M") witnesses, HECO requires these additional employees to perform the work that the Company expects to complete in 2007. By reflecting the resource requirements as regular employees, the Company also has forecasted the associated labor costs that are required to perform such work.

Q. Can the Company increase overtime in place of hiring additional employees?

A. Yes, but only for a limited time. Excessive overtime experienced over a long period of time will lead to employee fatigue which results in lower quality work. Also, it may lead to lower morale and lower productivity and eventually to the employee leaving the Company.

Q. Can the Company continue to use contractors and temporary help to complete its work requirements?

A. It can to some extent. In instances where very specialized and nonrecurring tasks are required to be performed, the hiring of contractors or agency workers on a temporary basis may be the most cost effective method for the Company to perform its work. But, generally, hiring regular employees to perform the normal, routine, and ongoing duties is more cost efficient and effective than using temporary workers or contractors in the long run.

Q. Why would regular employees be more efficient and effective over the long-term?A. The advantages of having regular employees rather than consultants, contractors or temporary workers are that employees will be knowledgeable and conversant with the Company-specific issues, eliminating the learning curve impacts and associated time that is required by outside parties to learn the subject matter. Rather than the Company conducting a search and negotiation for each specific circumstance, the knowledge gained by regular employees on the job will allow the Company to assign and reassign these resources with greater flexibility to various duties and functions. Furthermore, the quality of work produced by regular employees will be more consistent and in line with what management expects because of the direct supervision and daily communication that will take place. Having a more efficient and effective workforce lowers costs in the long-term which is a benefit to the Company and to its ratepayers.

Q. What adjustments were made to the employee counts for the test year?

A. There were two adjustments made for the test year. The first adjustment was the removal of eleven DSM employees from the Energy Services Department. As Mr. Alan Hee discusses in HECO T-9, the Company has removed the DSM surcharge revenues and the costs recovered by the surcharge from the test year since DSM cost recovery is being addressed in Docket No. 05-0069. The second adjustment was made to decrease the Customer Accounts Department's test year employee count and reflect an updated hiring plan for the test year. Mr. Darren Yamamoto discusses the Customer Service Department's employee count adjustments in T-8. Both of these adjustments are reflected in HECO-WP-1401.

Q. The level of employees included in the adjusted budget as of January 1, 2007 is 1,541, as shown in HECO-WP-1401. Does HECO expect to have that number of employees on board as of January 1, 2007?

A. No. The estimated employee count as of December 31, 2006 (taking into account the DSM adjustment) is 1,443 as shown on HECO-1403.

Q. Please explain the purpose of this estimate the 2006 Projected End-of-Year estimate..

A. The 2006 Projected End-of-Year estimate of 1,443 was developed by the Workforce Staffing and Development Department as part of its internal work plan for the remainder of 2006. It is included to show the Company's best estimate of the number of employees that will be on its payroll at the end of 2006.

Q. Please explain why the 2006 Projected End-of-Year estimated employee counts are not used as a surrogate for the January 1, 2007 employee count estimate in the calculation to determine the Company's average test year employee count.

A. The 2006 Projected End-of-Year estimate is used for internal work planning and is continually updated as information on retirements, transfers and new positions becomes known. As such, it has no relationship to the 2007 test year budget, and it would be inappropriate to include it in the calculation of the average employees in the test year.

Q. Why weren't more adjustments made to the test year O&M expenses to reflect the fact that a significant number of positions would not be filled at the beginning of 2007?

A. The short answer is that that would result in a significant understatement of the O&M expenses expected for 2007, unless upward revisions also were made to reflect the additional overtime, contract services and temporary hires that would have to be incurred or added to accomplish the expected work load.

In each O&M area, witnesses were asked to make such an adjustment if the additional work was expected to be deferred beyond 2007, but not if the work was expected to be accomplished through other means that would result in the incurrence of O&M expenses, or if the additional employees were expected to be hired shortly after the beginning of 2007. The individual witnesses who address the estimated number of positions required by their departments will explain what adjustments were made.

Q. Please discuss how HECO temporarily reassigns work to merit exempt employees in addition to their regular responsibilities.

A. Many of HECO's exempt merit employees were promoted from within the Company and possess key knowledge and skills from previous jobs held. At times when a position becomes vacant and an immediate replacement is not found, HECO's exempt merit employees take on additional work to ensure that key duties and tasks are performed, ensuring that reliability and service to customers are not compromised.

This practice is, at best, a temporary measure that cannot continue for an indefinite period of time. After a while, if the vacancies are not filled, certain work will not get done and employee morale and effectiveness will decline.

Q. Are merit exempt employees paid additional compensation to temporarily take on responsibilities in addition to their regular responsibilities?

A. Merit employees classified as exempt are not entitled to overtime payment. This group of exempt employees includes non-bargaining supervisory, professional and managerial level employees who are responsible for overall results of their assigned areas. While many exempt employees work beyond the standard 40 hour work week, no additional compensation is paid to these employees except under extreme circumstances, such as severe storms and when approved by the HECO President. The only exception are merit supervisors of bargaining unit employees who receive extra straight time pay for hours worked in excess of 40 hours per week while directly supervising bargaining unit employees.

THE HIRING PROCESS AND RECRUITMENT

Q. Please describe HECO's hiring process.

A. The hiring process begins when a department submits a Job Vacancy Requisition (JVR) to Workforce Staffing and Development. With the receipt of the JVR, Workforce Staffing and Development then begins the recruitment process which takes a minimum of six weeks.

Q. Please explain why it takes a minimum of six weeks to recruit new employees.

A. An overview of the hiring process is illustrated in HECO-1404. As described in this exhibit, HECO utilizes a rigorous multi-step recruitment process and each step requires a certain time to complete.

HECO's recruitment process begins with the posting of a vacancy within the Company, followed by or sometimes concurrently with postings at HECO's affiliate companies. External recruitment may also take place during the internal and affiliate posting period.

External recruitment includes posting the job vacancy with the Department of Labor and Industrial Relations, military organizations and other organizations that ensure equal employment opportunity. HECO advertises its vacancies in local newspapers, on its website, on its telephone employment hotline and will advertise some difficult-to-fill positions in the mainland via various internet sites or professional publications.

After a pool of applicants is identified, the hiring supervisor and his or her team must review the applications, conduct interviews, and review job skills test results. These steps may take from several weeks to several months. Once a selection is made, the hiring supervisor must receive final approval from within their process area before making the job offer. Obtaining this approval may take one to ten days.

Q. Is this hiring process followed for all HECO positions?

A. For the most part. However, for bargaining unit entry-level positions, pre-employment testing is also required. Pre-employment testing assists the Company in screening and evaluating where there may be several hundred applicants for a position. In the case of entry-level positions, HECO draws a large number of applicants, and processing the applications can be time consuming. The greater difficulty, however, lies in identifying qualified applicants with the aptitude for success in the job and the ability to move along lines of progression. The testing program helps to identify such candidates, and for some positions, multiple tests are required. As noted in HECO-1404, this testing may extend the hiring process for an additional four to seven weeks.

HECO-1405 outlines the hiring process for Linemen positions, which begins with hiring Senior Helpers at the entry level, and illustrates the timeframes involved in filling a position. As shown on this exhibit, although a large number of applicants may apply, a much smaller percentage actually makes it to the interview stage.

Q. What challenges does HECO face in recruiting qualified candidates for its job openings?

A. HECO has experienced several challenges to successful recruitment and hiring. First, the Company is experiencing a decline in the number of applicants for its vacancies. In 2003, HECO averaged 75 applicants for each vacancy. Unfortunately, the numbers have declined to 38 and 31 in 2004 and 2005, respectively. Low unemployment rates, high paying jobs in construction and other industries, a reduction in power engineering graduates nationwide and an industry-wide shortage of skilled utility workers have resulted in strong competition for candidates. Hawaii does not have an adequate supply of power engineers and journeypersons in line and substation work. For engineers, HECO has expanded its recruitment to the mainland which has extended the time required to fill many of the Company's engineering vacancies. For journey-level line and substation employees, HECO hires at the entry level and develops these employees through trainee or apprenticeship programs.

Compliance requirements have also increased the time it takes to fill a job. For example, a decision by the Ninth Circuit Court in 2005 (Leonel v. American Airlines, Inc., No.03-15890 (9th Cir. 2005)) resulted in a change to the Company's post-offer process. That decision clarified for all employers that physical examinations (such as functional capacity tests and drug screens) must be the last step in the hiring process in order to comply with Title 1, 42 U.S.C., §12112(d)(3) of the Americans with Disabilities Act. Previously, HECO coordinated the background check and physical exam at the same time. Changing from concurrent to sequential procedures has extended the hiring process by at least three days to sometimes more than a month if out-of-state background checks are required.

HECO also experiences delays because there are a limited number of occupational medicine service providers who are able to provide the range of services required, such as post-offer drug screens and physical examinations. These providers have limited staff, a situation which also extends the time involved in processing and hiring a new employee. For example, chest x-rays are required for certain positions. For the past two years, only one x-ray physician at Straub is a "B-Reader," a certification required by the Occupational Safety and Health

Administration (OSHA. 1910.1001, Appendix E: Interpretation and Classification of Chest Roentgenograms (X-Ray)...Mandatory... (a) (b) & (c) ... For workers with asbestos exposure...). Work waits when he is not available. The situation is worse with the other local provider whose service hours are limited. This causes test and exam results to take longer to be received, and results are provided piecemeal, requiring time-consuming tracking and coordination on HECO's part. It now takes more than a week from the prospective employee's appointment to obtain the examination results, whereas three years ago it took only 2-3 days.

Collectively, these and other challenges in finding qualified candidates have resulted in a longer time to fill vacancies. In 2001, the average time to fill positions was 45 days. The average time to fill positions in subsequent years was as follows:

Average Time to Fill	
Year	Number of Days
2002	55
2003	58
2004	77
2005	67

As of September 30, 2006, the average time to fill positions is 66 days, three weeks longer than experienced in 2001.

Q. What has HECO done to address its recruitment challenges and reduce the gap of unfilled approved jobs?

A. HECO continually looks for ways to improve hiring and shorten the time it takes to fill positions while remaining committed to creating and maintaining a safe and productive workforce. In addition to traditional recruitment methods, HECO has implemented new programs and processes to improve and shorten its hiring processes. These programs and process improvements are listed in HECO-1406.

One of HECO's most successful programs was the reinstatement of the Summer Intern program in 2004. Of the 17 interns hired in 2004, five were offered regular, full-time positions in 2005. Three of those five positions were difficult-to-fill utility skills positions. In 2005, eight of 22 summer interns were offered continued employment, with two in critical utility skills positions. As of September 30, 2006, two former summer interns are continuing employment as Project Aides during the school year.

In 2006 HECO also implemented new entry level aptitude testing for its bargaining unit trades and clerical positions. These tests were developed by the Edison Electric Institute (EEI) specifically for utility positions and will assist in the identification of better candidates for utility positions and ensure better job fit. Supported by EEI data, passing test scores will be valid for up to five years versus the one year under the old tests. This means that HECO can maintain a test-qualified pool of candidates for a longer period, reduce the number of testing sessions, and shorten the recruitment process in the long run. HECO-1406 provides other examples of what the Company is doing to accelerate the hiring of qualified employees. Other steps that the Company has taken are described in the O&M testimonies.

POSITION VACANCIES

Q. How many positions are vacant in the departments that you support in your testimony?

A. There were 26 vacant positions as of September 30 when compared to the employee count of 406 for these departments estimated for the end of the test year. In this section, I will use the term "vacancy" to refer to positions that are filled for revenue requirement purposes for at least a portion of the test year but were vacant as of September 30, 2006.

Q. Please explain why HECO requires these additional positions?

A. There are two types of vacancies reflected in the calculated difference between the actual and test year average. As shown in HECO-1407, seventeen of the vacancies are for "replacements" which occur with the natural movement of employees into other positions that become open with terminations or transfers of existing employees, both voluntary and involuntary. This type of vacancy is temporary in nature and is required to support the current and historical operations and workload of the Company. The second type of vacancy is for "new" positions, of which there are nine, to support the additional workload that is required by the Company in the test year.

Q. Why is the 2007 average employee count more representative of the labor resources required to support the current workload as opposed to the most recent actual employee count?

A. As I have explained previously, it has become more and more difficult to recruit qualified employees into the Company. 2006 has been very difficult with local applicant levels dropping for other than entry-level positions, forcing the Company to extend its recruitment to the mainland and to use different and innovative channels to reach as many qualified candidates as possible. Second, voluntary nonretirement terminations have increased in the recent past due to the highly competitive labor market. In 2004, voluntary nonretirement terminations accounted for only 28% of all terminations. In 2005, voluntary nonretirement terminations accounted for 43% of all terminations, and as of September 2006, the rate is 54%. The most recent 2006 actual employee counts do not reflect what the departments require to support the current workload. The 2007 test year average counts are more representative of the various departments' 2007 requirements.

<u>President's Office</u>

Q. What areas does the President's Office include?

A. As shown in HECO-1407, the President's Office includes the Corporate Audit and Compliance Department in addition to the President's Office itself.

Q. How many vacancies were there in the Corporate Audit and Compliance Department as of September 30, 2006?

A. There was one vacancy.

Q. Why is the position in the Corporate Audit and Compliance area required?

A. The vacancy in this department is due to internal movement of the Department Secretary, who was promoted to the Corporate Excellence process area as Executive Secretary to the Corporate Excellence Vice President in July 2005. The Corporate Audit and Compliance Secretary position provides advanced secretarial and administrative support to the department Manager. This position also carries out departmental processes and tasks such as budget coordination, timekeeping and supplies ordering. Due to the expansion of the department in 2005 to meet Sarbanes-Oxley and audit requirements and deadlines and turnover, eight positions have been recently filled, and the department currently lacks space for the Secretary position. Negotiations for a larger office space are currently underway, and the department plans to move by the end of 2006. Once the move is completed, the manager will fill the secretary vacancy which is expected in early 2007. Also, two Internal Auditors unexpectedly resigned in December, and the manager plans to backfill these positions in early 2007 as well.

Q. There are three vacancies in the President's Office. What are the reasons for hiring these employees in 2007?

A. Two of the vacancies are actually positions that have been transferred to the Finance and Public Affairs departments as specified in HECO-1407 under "Management Transfers." The remaining vacancy is due to internal movement of the Executive Administrative Assistant who transferred to the Corporate Excellence process area. The vacated Executive Administrative Assistant position provides administrative and clerical support to the Chief Executive Officer (CEO) and the CEO's Office Administrator, including assisting with the CEO's schedule by prioritizing appointments and meetings, processing all correspondence and answering telephone calls, and serving as a liaison to the offices of other HECO executives and external parties. This position also provided support to the Director, Strategic Initiatives, who reported to the Chief Executive Officer. At the time the incumbent vacated the position, discussions began regarding the reorganization of the Strategic Initiatives function and its administrative support. Because of the uncertainty regarding the reorganization, the Executive Administrative Assistant's work has been covered by the CEO's Office Administrator or temporarily delegated to the Vice President offices. The Company has recently determined that the demands on the CEO's office, typical mission-critical, high priority or time sensitive matters, require more than ad hoc coverage from other areas. Consequently, the Executive Administrative Assistant position is currently under active recruitment with plans to fill the position in early 2007.

Corporate Excellence

Q. What areas does the Corporate Excellence Vice President's Process Area include?

A. As shown in HECO-1407, the Corporate Excellence Vice President's Process Area includes the Compensation and Benefits Department; the Industrial Relations Department; the Safety, Security and Facilities Department; and the Workforce Staffing and Development Department in addition to the Corporate Excellence Vice President's Office itself.

Q. As of September 30, 2006, there were three vacancies in the Compensation and Benefits Department. Please describe these positions and the status of filling them.

A. The three vacant positions are as follows: Employee Benefits System Administrator, Pension Specialist and Administrative Assistant. All three vacancies were the result of internal movements or terminations. Because the Employee Benefits System Administrator position was recently filled, there are actually only two vacancies in this department. Other critical priorities and deadlines have temporarily kept the department from focusing on backfilling the remaining two positions. Parts of the work done by the Pension Specialist and Administrative Assistant are currently being covered by an unbudgeted agency temporary worker whose costs are reflected in the Company's nonlabor expenses. The department is in the process of securing an additional unbudgeted temporary worker in order to meet workload demands. The remainder of the work has temporarily been covered by the exempt staff in the department.

Q. What is the additional position vacancy in the Safety, Security & Facilities department?

A. This is a new position for a Facilities Building Technician whose responsibilities include assisting in the administration of the repair and maintenance contracts/programs of HECO's building systems. The Facilities Building Technician will conduct engineering studies and investigations to confirm the structural integrity of buildings and equipment. This position will also serve as a back up to the Facilities Maintenance Engineer.

Major activities planned for 2007 include air conditioning projects at the Company's King Street building, Ward Avenue Complex basement, and Archer Substation and the bidding process for HECO's air conditioning maintenance contract. Currently, there is only one Facilities Engineer to oversee these projects in addition to overseeing the maintenance and troubleshooting of all equipment, managing indoor air quality issues, and overseeing outside vendors. One Facilities Engineer cannot simultaneously respond to trouble calls, issues from employees and the public, and ongoing major renovation work. Furthermore, because the facilities are aging and additional attention is required to maintain and repair them, it is more difficult for the Facilities Engineer to meet these increasing demands. By filling the additional position, the Company's risk and exposure for more costly repairs is reduced.

Q. When are the vacancies in the Corporate Excellence Process Area expected to be staffed?

A. The plans are to fill these vacancies by the end of January 2007. The Workforce Staffing and Development department is also actively recruiting for a replacement Human Resources Assistant to fill a vacancy that recently occurred in December. . If the Corporate Excellence departments are unable to fill the vacancies, in order to perform the work that must be completed throughout the year, the Company will either request the current employees to work overtime or enlist the support from other labor resources through the use of contractors or outside vendors. Labor expenses will still be incurred with higher than anticipated overtime and/or nonlabor expenses will be higher than budgeted with the additional use of contractors and outside vendors.

<u>Finance Vacancies</u>

Q. What areas does the Financial Vice President's Process Area include?

A. As shown in HECO-1407, the Financial Vice President's Process Area includes the Information Technology and Services Department, the Management Accounting and Financial Services Department, and the Risk Management Division in addition to the Financial Vice President's Office itself.

Q. As of September 30, 2006, there were two vacancies reflected in the Information Technology and Services Department. Please describe these positions and the status of filling them.

A. The vacant positions are two Development Analyst positions which are replacements due to internal movements or terminations. The first was actually filled on October 16, 2006 and the second is expected to be filled in early 2007. With these two replacements, the Information and Technology Services Department will achieve its test year employee count of 94. However, in anticipation of vacancies due to internal transfers, the department recently hired two additional Mail Clerks which will bring the department temporarily above itsr test year employee count by one at year end 2006.

Q. Why does the Financial Vice President's Office show a decrease in its employee count?

A. As noted under the President's Office in HECO-1407, the Financial Vice President's September 30 staffing level already reflects the management transfer of the Strategic Initiatives Director position from the President's Office with the

President's Office current staffing level reflecting the corresponding decrease. This transfer is not reflected in the test year but there is no impact to the Company's overall employee count.

<u>General Counsel/Legal Vacancies</u>

Q. What areas does the General Counsel's Process Area include?

A. As shown in HECO-1407, the General Counsel's Process Area includes the Legal Department in addition to the General Counsel's Office itself.

Q. Please describe the vacant position and the status of filling it.

A. The vacancy was a replacement for an Administrative Assistant in the Land and Rights of Way Division who was promoted and transferred to another department on September 18, 2006. The Company filled the vacancy in November and the department is now at its test year employee count of 16.

<u>Energy Solutions Vacancies</u>

Q. What areas does the Energy Solutions Senior Vice President's Process Area include?

A. As shown in HECO-1407, the Energy Solutions Senior Vice President's Process Area includes the Customer Installations Department, the Energy Projects Department, the Energy Services Department, the Integrated Resource Planning Division, and the Technology Division in addition to the Energy Solutions Senior Vice President's Office itself.

Q. As of September 30, 2006, there were seven vacancies reflected in the Customer Installations Department. Please describe these positions and the status of filling them.

A. In the Customer Installations Department, six of the seven vacancies are a result of internal employee movement or terminations. Those six replacement positions are as follows: Junior Customer Planner (3), Junior Drafter, Meter Engineer and Clerk Typist. The seventh vacancy is for a new position titled, Field Coordinator. The status of each of these vacancies is discussed below.

The Junior Customer Planner is a bargaining unit position responsible for planning the installation of underground and overhead service to residential, commercial, and industrial customers whose demands are 10 KVA and below. The department recently filled one of its vacancies; however, it has experienced various challenges in finding qualified personnel. For example, in the recent selection, a job offer had been made and accepted. The candidate subsequently rescinded his acceptance. Because more than 30 days had elapsed since the position was first posted internally, under HECO's collective bargaining agreement, the vacancy had to be posted internally again. Consequently, HECO was unable to consider the next candidate until other employees who may have missed or been ineligible for the initial posting had the opportunity to apply. There were no new applicants, and the process was delayed. Unfortunately, there are no remaining qualified candidates to fill the remaining positions. Meanwhile, the department has been covering the workload through the use of agency temporary help.

The Junior Drafter is also a bargaining unit position and performs drafting work associated with additions to, and changes in, the physical facilities of the Company. The position performs field checks and assists in field investigations of these facilities. The department is covering the workload through the use of an outside consultant while it works to fill its other vacancies first.

The Meter Engineer position was recently vacated due to a promotion, and the department is actively recruiting for its replacement. A job offer was made; unfortunately, the candidate, who would have had to relocate, declined the offer on

November 3, 2006. The department is currently evaluating whether a second qualified candidate is available from the existing candidate pool or whether they will begin the recruitment process anew.

The final replacement position is for a Clerk Typist who provides clerical support for the Department and/or its various Divisions. This position is expected to be filled in early 2007.

The seventh vacancy is for a new position, Field Coordinator, who will be responsible for testing, installing and removing meters in the field on the HECO system. This position is also responsible for assisting contractors and electricians in complying with HECO meter requirements and assisting the Meter Supervisor in coordinating the meter apprenticeship training. The department is in the process of finalizing the position description so that an appropriate compensation level can be determined. In the absence of a filled position, the department has hired a consultant to perform the work.

Q. When will the seven vacancies be staffed?

A. The Company anticipates that all seven vacancies will be staffed by March 2007.

Q. Please describe the position that is vacant in the Energy Projects Department.

A. The vacancy is a replacement for a Senior Technical Services Engineer who voluntarily terminated his employment in June of 2006. The Senior Technical Services Engineer position prepares project proposals and acts as project engineer/construction manager for distributed generation and renewable energy projects in the commercial, governmental, and industrial sectors.

Beginning in 2007, the overall workload of the Energy Projects Department will increase above current levels. Examples of significant projects that are scheduled for 2007 include the installation of a substation DG project on

Oahu, installation of a large photovoltaic project at HECO's Ward Avenue site, installation of a dispatchable standby generation project at a customer site on Oahu, and the commencement of work with the State of Hawaii Department of Transportation on the design and engineering for a dispatchable standby generation facility at the Honolulu Airport. This position is expected to be filled in early 2007.

Special Projects Vacancies

Q. Why does the Special Projects Vice President area reflect a decrease in its employee count?

A. The decrease in the employee count is the result of a management transfer that will occur when the Outage Management System Project is completed. Please refer to HECO T-7, testimony of Robert Young, for discussion on the transfer of the project director to the System Operations Department.

Public Affairs Vacancies

Q. What areas does the Public Affairs Senior Vice President's Process Area include?

A. As shown in HECO-1407, the Public Affairs Senior Vice President's Process Area includes the Government Relations Department in addition to the Public Affairs Senior Vice President's Office itself.

Q. Why does the Public Affairs Senior Vice President's Office reflect a decrease in its employee count in the test year from the September 30, 2006, count?

A. As noted under the President's Office in HECO-1407 under "Management Transfers" and discussed earlier in my testimony, the Public Affairs Senior Vice President's September 30 staffing level already reflects the management transfer of the Corporate Secretary from the President's Office with the President's Office current staffing level reflecting a corresponding decrease. This transfer was not reflected in the test year but there is no impact to the Company's overall employee count.

An unexpected vacancy occurred in the Government Relations Department with the departure of the Director in December 2006. The Company expects that to fill this position in early 2007.

Corporate Relations Vacancies

Q. What areas does the Corporate Relations Vice President's Process Area include?

A. As shown in HECO-1407, the Corporate Relations Vice President's Process Area includes the Corporate Communications Division in addition to the Corporate Relations Vice President's Office itself.

Q. As of September 30, 2006, there was one vacancy in this Process Area. Please describe the position and the status of filling it.

A. The vacancy is a replacement in the Corporate Communications Division due to the promotion of the Senior Corporate Communications Consultant to Director in August 2006. The new Director is currently actively recruiting to backfill his position and plans to fill it by the end of January 2007. With this replacement, the Corporate Relations Process Area will be at its test year employee count of 12.

Government and Community Affairs Vacancies

Q. What areas does the Government and Community Affairs Vice President's Process Area include?

A. As shown in HECO-1407, the Government and Community Affairs Vice President's Process Area includes the Education and Consumer Affairs Division, the Government Relations Division, and the Regulatory Affairs Division in addition to the Government and Community Affairs Vice President's Office itself.

Q. Ms. Chiogioji, please explain the increase of eight employees in the Regulatory Affairs area in 2007.

A. The Regulatory Affairs group has estimated the need to increase its employee count by eight. Of this increase, seven new employees are reflected in 2007, beginning July 2007, to meet the heavy regulatory workload which began in the last few years and is anticipated to continue in the future.

Q. Please describe how the regulatory workload has increased recently.

A. The Regulatory Affairs Division has had an unprecedented level of activity in the last few years. In addition to this proceeding, Regulatory Affairs has managed and been involved in the following major proceedings in the last year and a half:

Docket No.	Description
03-0253	Integrated Resource Planning (IRP-3)
03-0372	Competitive Bidding
03-0371	Distributed Generation
03-0417	East Oahu Transmission Project
05-0069	Energy Efficiency
05-0310	Accumulated Other Comprehensive Income
05-0330	Issuance of Unsecured Obligations and Guarantee
05-0145	Campbell Industrial Park Generating Station
05-0146	Community Benefits
2006-0003	Human Resources Suite

The Company has filed numerous other applications and requests for a wide variety of areas including capital improvement projects, debt issuances, load management programs and property transfers. In addition, due to increasing operational costs and the need for continued capital investment, the Company filed the first HECO rate case in ten years with the 2005 test year HECO rate case

(Docket No. 04-0113) on November 12, 2004. The Hawaiian Electric Companies subsequently filed the 2006 test year HELCO rate case (Docket No. 05-0315) on May 4, 2006, followed by this rate case and will file a 2007 test year MECO rate case (Docket No. 06-0387) in early 2007. These filings were in addition to the Regulatory Affairs' staff "normal" functions of handling Commission compliance reports and customer complaints.

Q. Why does Regulatory Affairs need more employees now?

A. In the past, the Regulatory Affairs Division has managed to support these filings through the use of merit overtime and, only in the past year, through the use of consultants. Because of the quantity of filings and the increasing complexity of these filings, the Regulatory Affairs staff is now working significant amounts of overtime as a matter of course, rather than on an infrequent or emergency basis. This situation should not continue much longer in the future since it may lead to deterioration of the quality of work produced and dissatisfaction of the staff, which may then leave for other positions in and outside of the Company. Because of the knowledge and experience required to perform regulatory work for the Company, the loss of such employees would be a blow to the Company as a whole and ultimately to its ratepayers and should be avoided.

Q. Why doesn't the Regulatory Affairs group use consultants and contractors on an as-needed basis to supplement its current workforce?

A. As I mentioned above, Regulatory Affairs has only recently hired regulatory consultants to specifically support rate cases, as opposed to consultants whose role is to testify as subject matter experts. However, because the Company will be filing rate cases on a regular basis along with rate cases for HELCO and MECO, hiring regular employees who are familiar with the Company-specific regulatory issues will be more efficient and effective over the long-term.

Q. Why would regular employees be more efficient and effective over the long-term?

A. The advantages of having regular employees rather than consultants are that employees will be knowledgeable and conversant with the Company-specific regulatory issues, eliminating the learning curve impacts and associated time that is required by consultants to learn the subject matter. The need for the department to conduct a search and negotiate with consultants for each specific case will be eliminated since the knowledge gained by regular employees on the job will allow the Company to assign and reassign these resources with greater flexibility to various proceedings for the Company, HELCO, and MECO within very short timeframes; and the quality of work produced by regular employees will be more consistent and in line with what management expects because of the direct supervision and daily communication that will take place.

Q. What are the eight positions that compose the difference between the September 30, 2006 employee count and that projected for end-of-year 2007?

A. The eight positions include five analyst positions, one director position, one manager position and one administrative assistant position. In December 2006, the Company filled one of the analyst positions and the administrative assistant position, but experienced a transfer of the existing administrative assistant to another department. Thus the number of vacant positions remains at seven. The department has posted the four analyst positions. The seven vacant positions are anticipated to be filled by the middle of the test year.

Q. Is the increase in employees in Regulatory Affairs warranted?

A. Yes. Given the need to file timely and accurate documentation with the Commission and to support the Company with its operational initiatives in the future, the staffing of the additional eight positions will significantly reduce the overtime being experienced by the current staff and the consultants' costs and allow Regulatory Affairs to maintain the high quality of work going into the future.

Other Departments

Q. Please confirm that the offices of the Vice President-Customer Solutions, the Senior Vice President-Operations, Vice President-Energy Delivery, and the Vice President-Power Supply require no additional employees for the test year period from the count that is reflected at the end of September 2006.

A. These departments and offices have not included additional employees in 2007 compared to their employee counts at the end of September 2006.

SUMMARY

Q. Please summarize your testimony.

A. The total average number of employees estimated by the Company for the test year 2007 is 1,548. With increasing demand for electrical service and power generation, as well as increased governmental regulations and requirements, HECO must increase its staffing level in order to provide the level of service required for its customers.

Q. Does this conclude your testimony?

A. Yes, it does.

Hawaiian Electric Company, Inc.

FAYE CHIOGIOJI

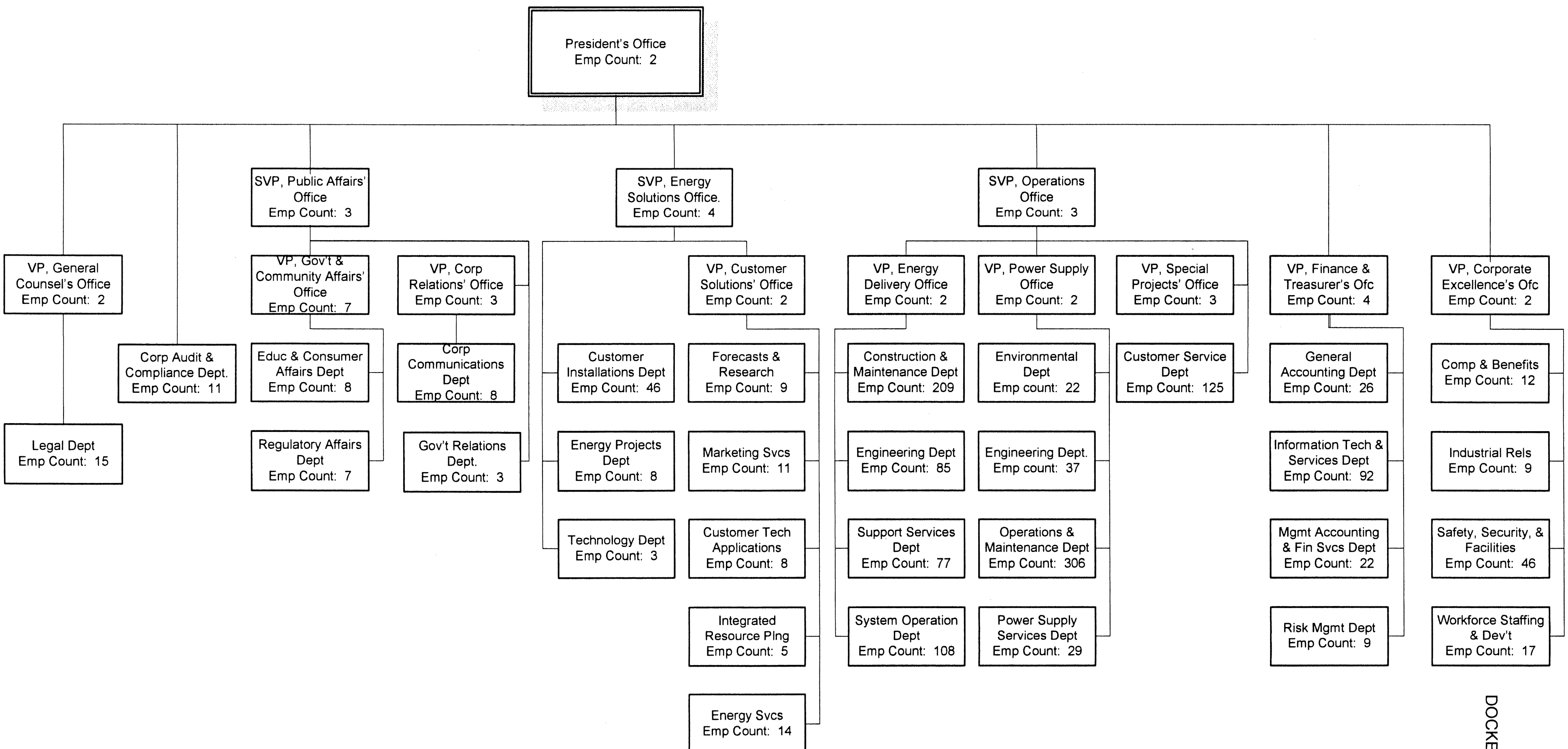
EDUCATIONAL BACKGROUND AND EXPERIENCE

Business Address:	Hawaiian Electric Company, Inc. 220 S King Street, Suite 700 Honolulu, HI 96813
Position:	Manager Workforce Staffing & Development
Education:	Bachelor of Arts, English, University of Hawaii at Manoa Masters in Business Administration with distinction, HR Management, Hawaii Pacific University Zenger Miller/Achieve Global Master Trainer, 1994 Senior Professional in Human Resources (SPHR) life certification, Human Resources Certification Institute/Society for Human Resource Management, 1995 Advanced HR Generalist Certification Program, Society for Human Resource Management, 1997
Experience:	HAWAIIAN ELECTRIC COMPANY, INC. 1998 - Present Manager Workforce Staffing and Development 1995 - 1998 Director Workforce Staffing and Development 1992 - 1995 Director Human Resource Development 1991 - 1992 Training Administrator Human Resource Development

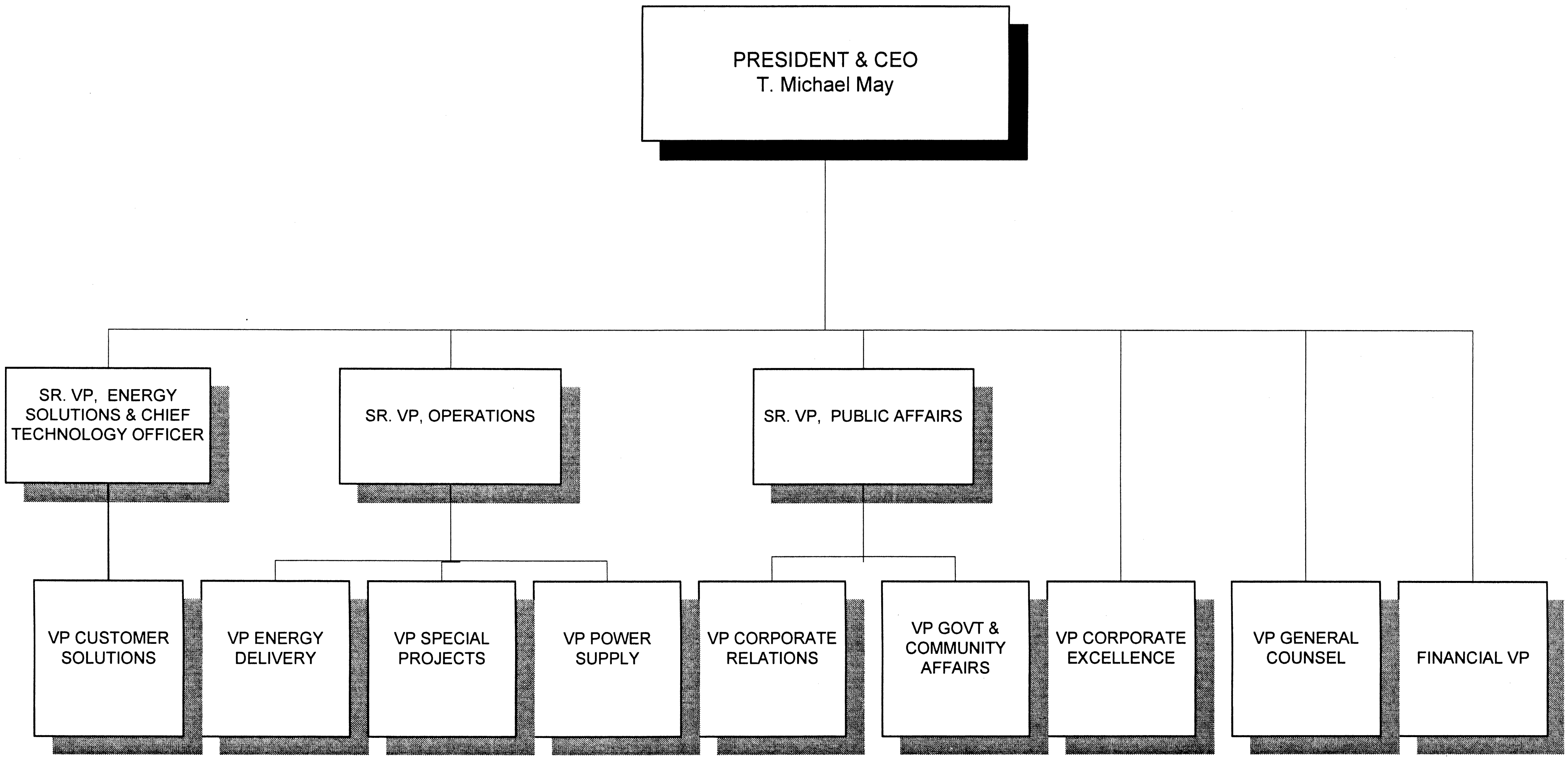
Organization	Department	Witness
President's Office		
	Corporate Audit & Compliance (Formerly Internal Audit)	Faye Chiogioji - HECO T- 14
	President's Office	" "
VP-Corporate Excellence		
	Compensation & Benefits	Faye Chiogioji - HECO T- 14
	Industrial Relations	" "
	Safety, Security & Facilities	" "
	Workforce Staffing & Development	" "
	VP-Corporate Excellence's Office	" "
VP-Finance		
	General Accounting	Patsy Nanbu - HECO T-10
	Information Technology & Services	Faye Chiogioji - HECO T-14
	Management Accounting & Fin Svcs	" "
	Risk Management	" "
	Financial VP/Treasurer's Office	" "
VP-General Counsel		
	Legal	Faye Chiogioji - HECO T- 14
	VP-Gen Counsel's Office	" "
Sr. VP-Energy Solutions		
	Customer Installations Dept.	Faye Chiogioji - HECO T- 14
	Energy Projects	" "
	Technology	" "
	Sr. VP-Energy Solutions' Office	" "
VP-Customer Solutions		
	Customer Technology Applications	Alan Hee - HECO T- 9
	Energy Services	" "
	Forecasts & Research	" "
	Integrated Resource Planning	" "
	Marketing Services	" "
	VP-Customer Solutions' Office	Faye Chiogioji - HECO T- 14
Sr. VP-Operations		
	Customer Service	Darren Yamamoto - HECO T- 8
	Sr. VP-Operations' Office	Faye Chiogioji - HECO T- 14
VP-Energy Delivery		
	Construction & Maintenance	Robert Young - HECO T- 7
	Engineering	" "
	Support Services	" "
	System Operation	" "
	VP-Energy Delivery's Office	Faye Chiogioji - HECO T- 14
VP-Power Supply		
	Environmental	Dan Giovanni - HECO T- 6
	Power Supply Engineering (formerly Planning &	" "
	Power Supply Operations & Maintenance	" "
	Power Supply Services	" "
	VP-Power Supply 's Office	Faye Chiogioji - HECO T- 14
VP-Special Projects		Faye Chiogioji - HECO T- 14
Sr. VP-Public Affairs		
	Governmental Relations	Faye Chiogioji - HECO T- 14
	Sr. VP-Public Affairs' Office	" "
VP-Corporate Relations		
	Corporate Communications	Faye Chiogioji - HECO T- 14
	VP-Corporate Relations' Office	" "
VP-Government & Community Affairs		
	Education & Consumer Affairs	Faye Chiogioji - HECO T- 14
	Regulatory Affairs	" "
	VP-Gov't & Comm Affairs' Office	" "

HAWAIIAN ELECTRIC COMPANY, INC.

Actual employee count as of 9/30/06

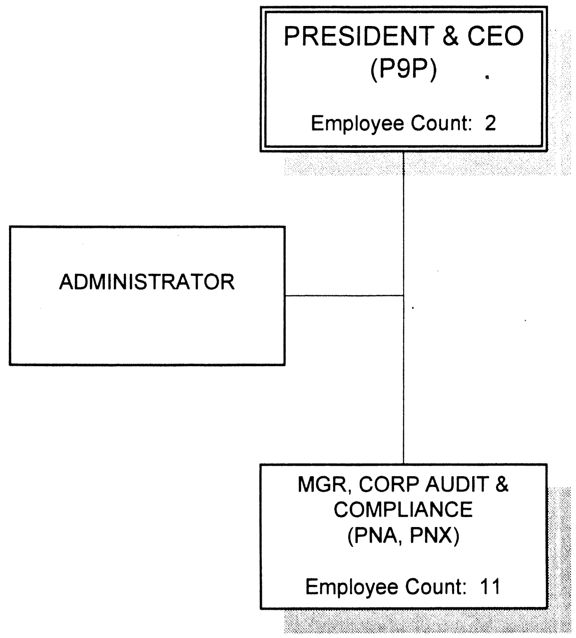


HAWAIIAN ELECTRIC COMPANY, INC.

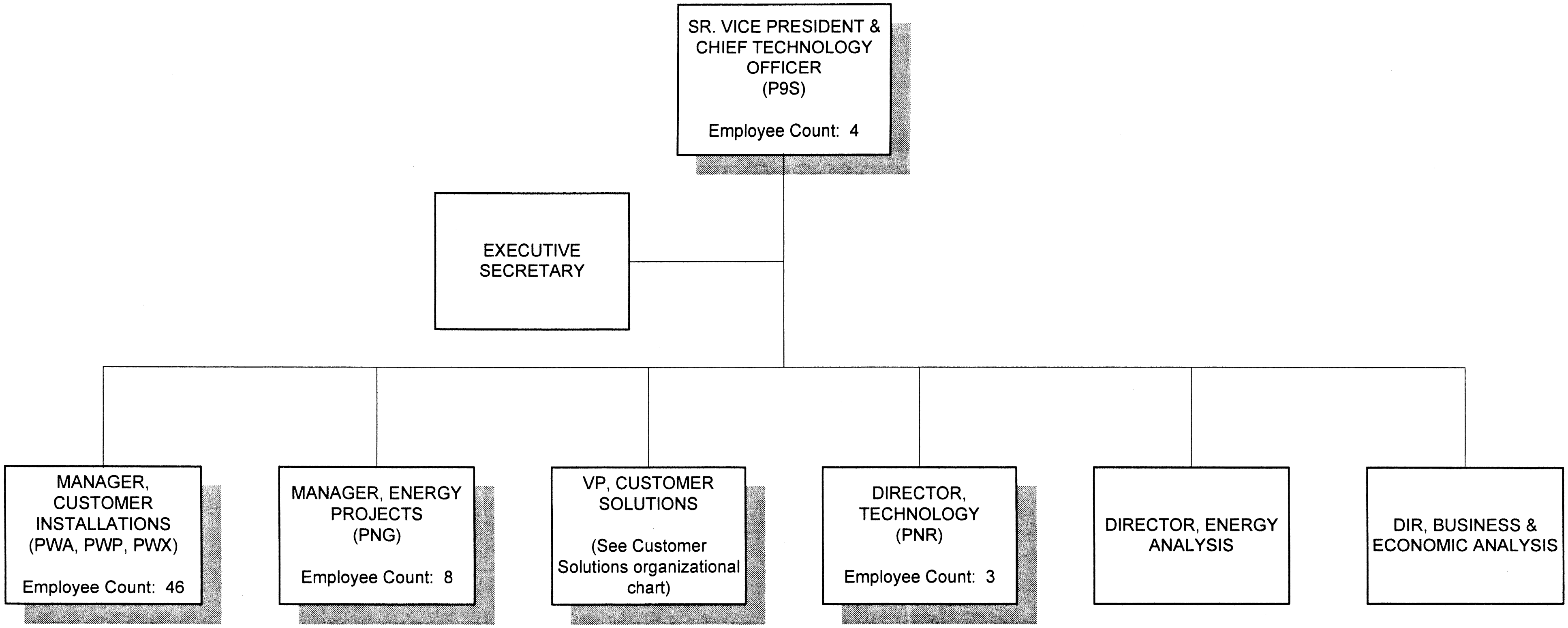


PRESIDENT – HECO

Actual employee count as of 9/30/06

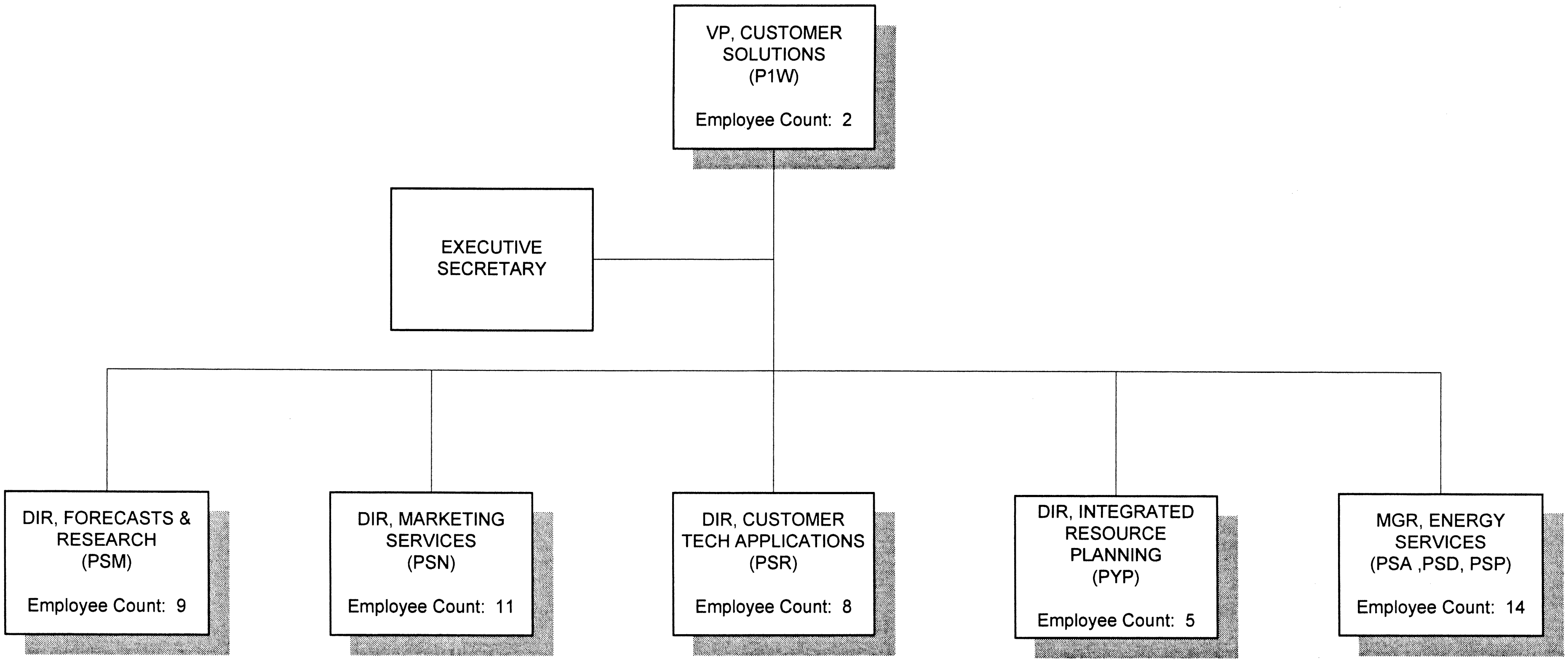


SR. VICE PRESIDENT ENERGY SOLUTIONS
Actual employee count as of 9/30/06



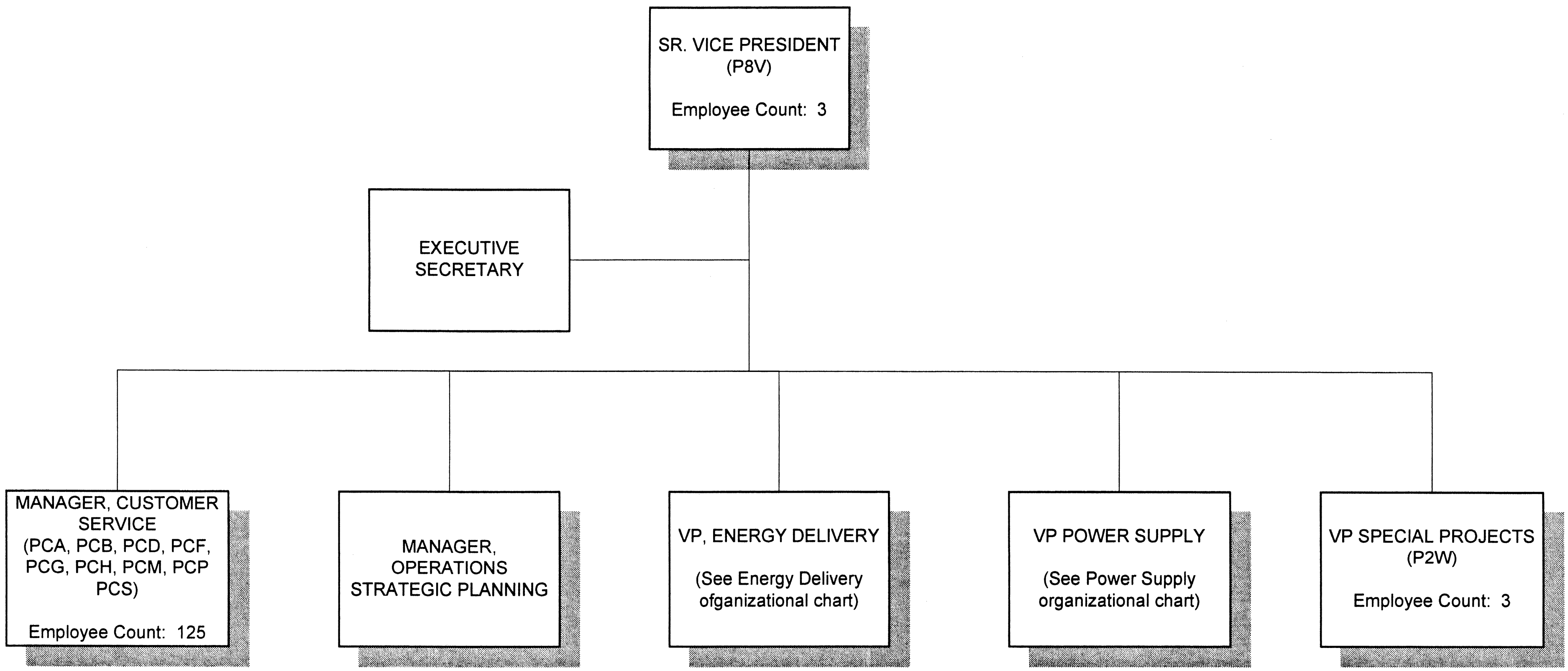
Customer Solutions

Actual employee count as of 9/30/06



SR. VICE PRESIDENT OPERATIONS

Actual employee count as of 9/30/06

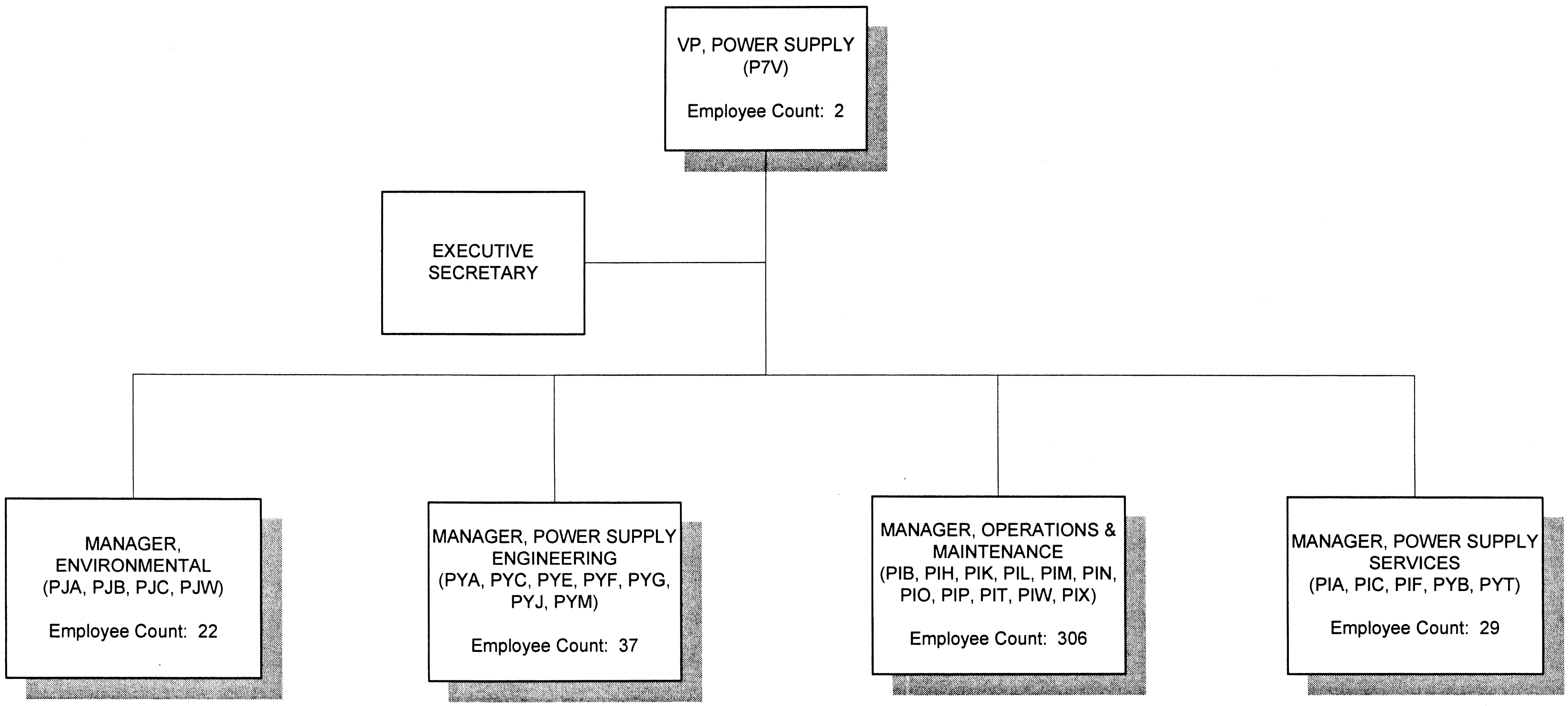


ENERGY DELIVERY

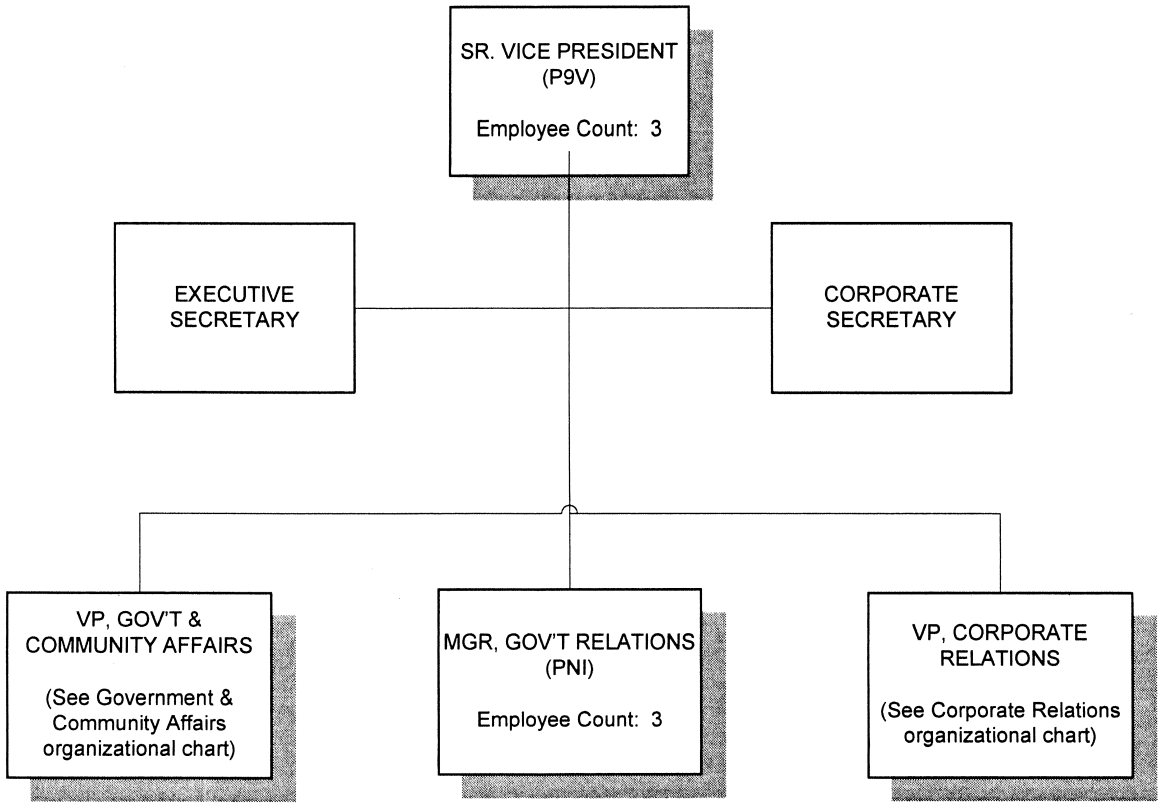
Actual employee count as of 9/30/06

- VP, ENERGY DELIVERY (P2V) — Employee Count: 2
  - EXECUTIVE SECRETARY
  - MANAGER, CONSTRUCTION & MAINTENANCE (PDA, PDC, PDD, PDF, PDJ, PDK, PDL, PDP, PDS, PDU, PDV) — Employee Count: 209
  - MANAGER, ENGINEERING, ENERGY DELIVERY (PBA, PBE, PBP, PBT, PBY, PBZ) — Employee Count: 85
  - MANAGER, SUPPORT SERVICES (PVA, PVF, PVL, PVM, PVP) — Employee Count: 77
  - MANAGER, SYSTEM OPERATION (PRA, PRC, PRD, PRE, PRI, PRR, PRS, PRX) — Employee Count: 108

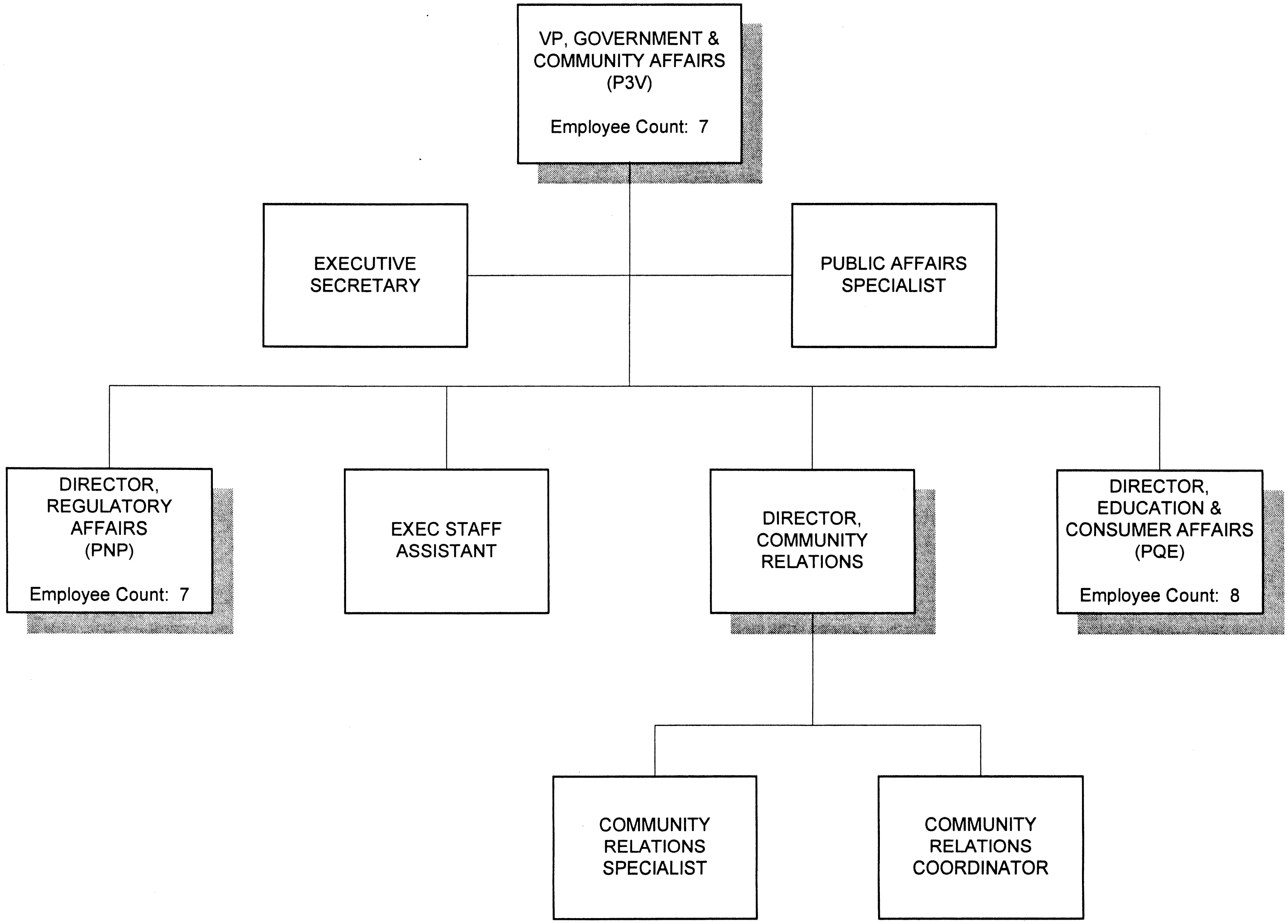
POWER SUPPLY
Actual employee count as of 9/30/06



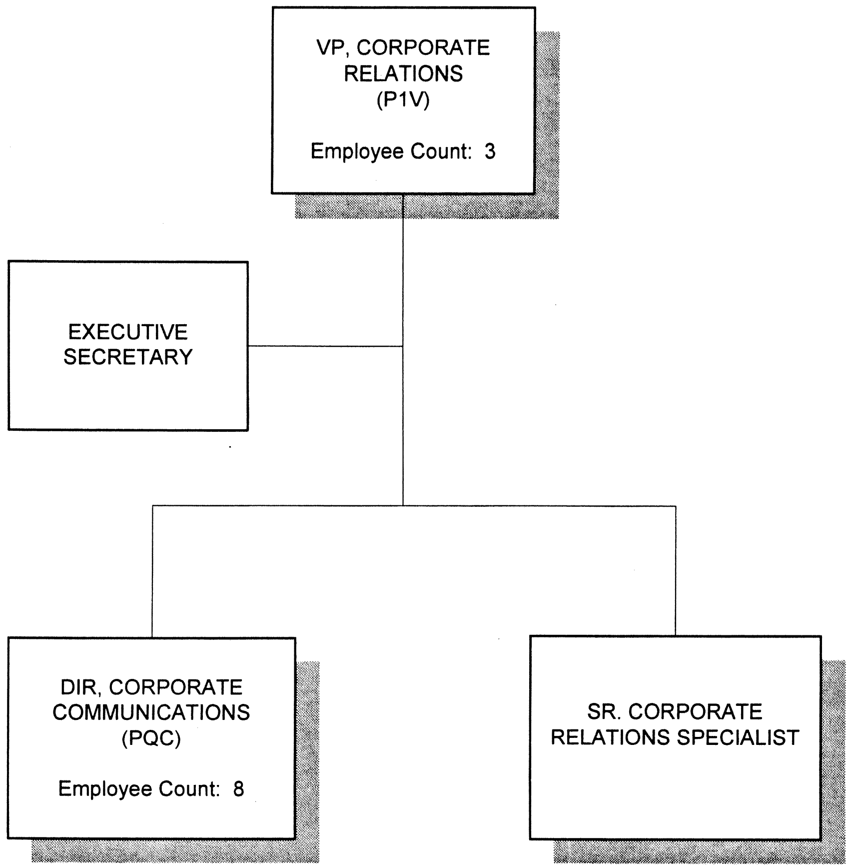
SR. VICE PRESIDENT PUBLIC AFFAIRS
Actual employee count as of 9/30/06



GOVERNMENT & COMMUNITY AFFAIRS
Actual employee count as of 9/30/06

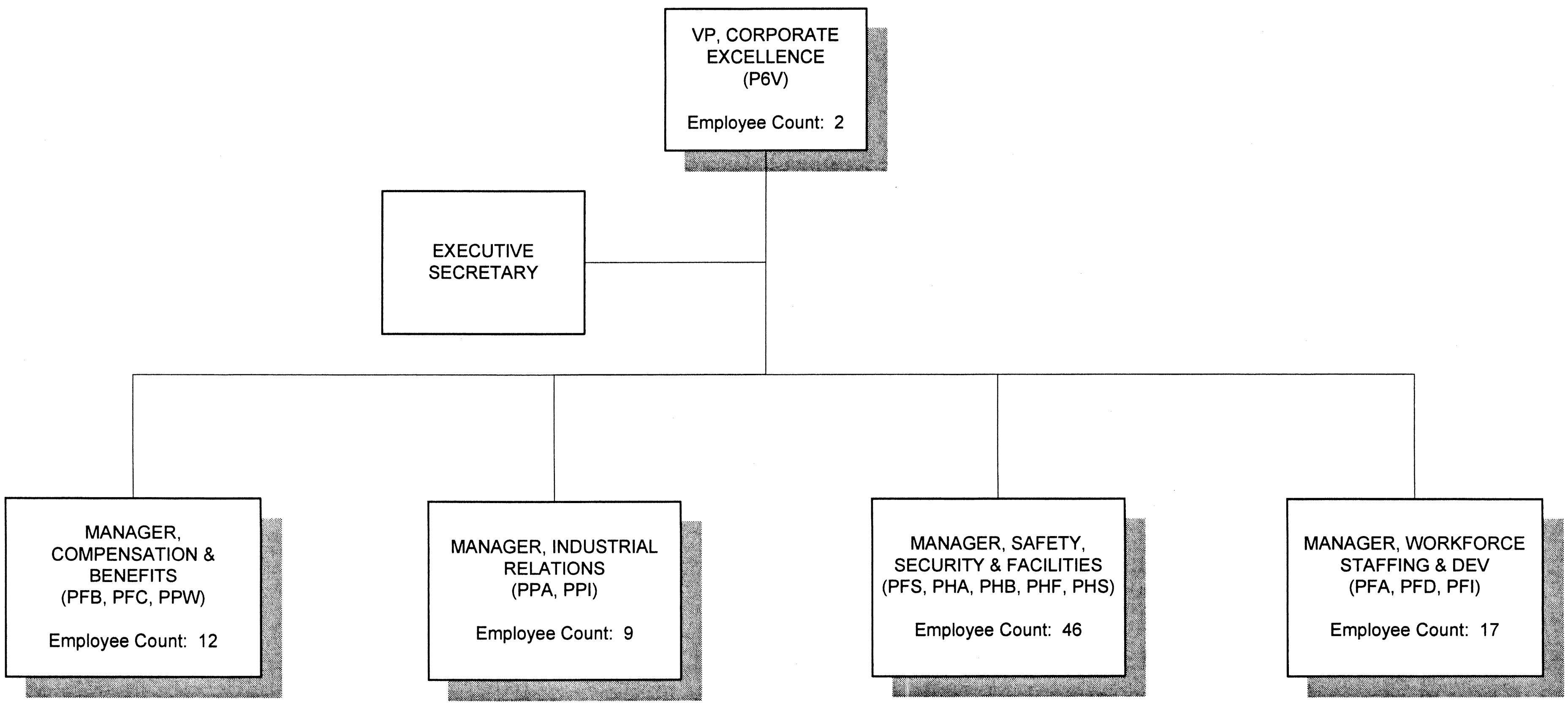


CORPORATE RELATIONS
Actual employee count as of 9/30/06



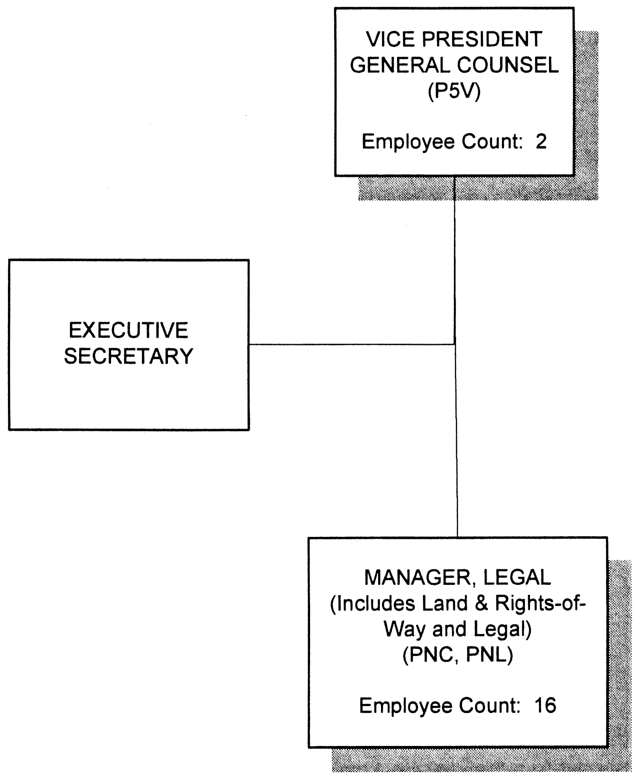
CORPORATE EXCELLENCE

Actual employee count as of 9/30/06

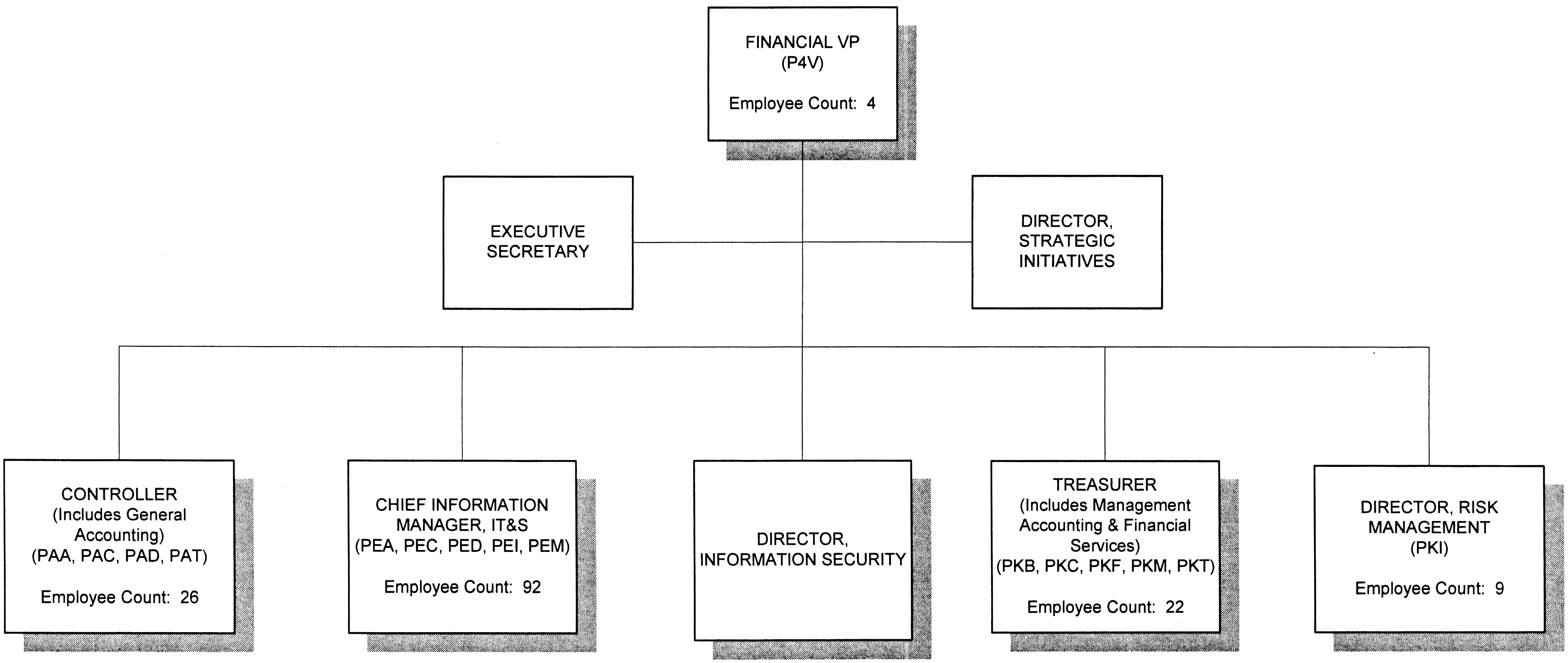


GENERAL COUNSEL

Actual employee count as of 9/30/06



FINANCE
Actual employee count as of 9/30/06

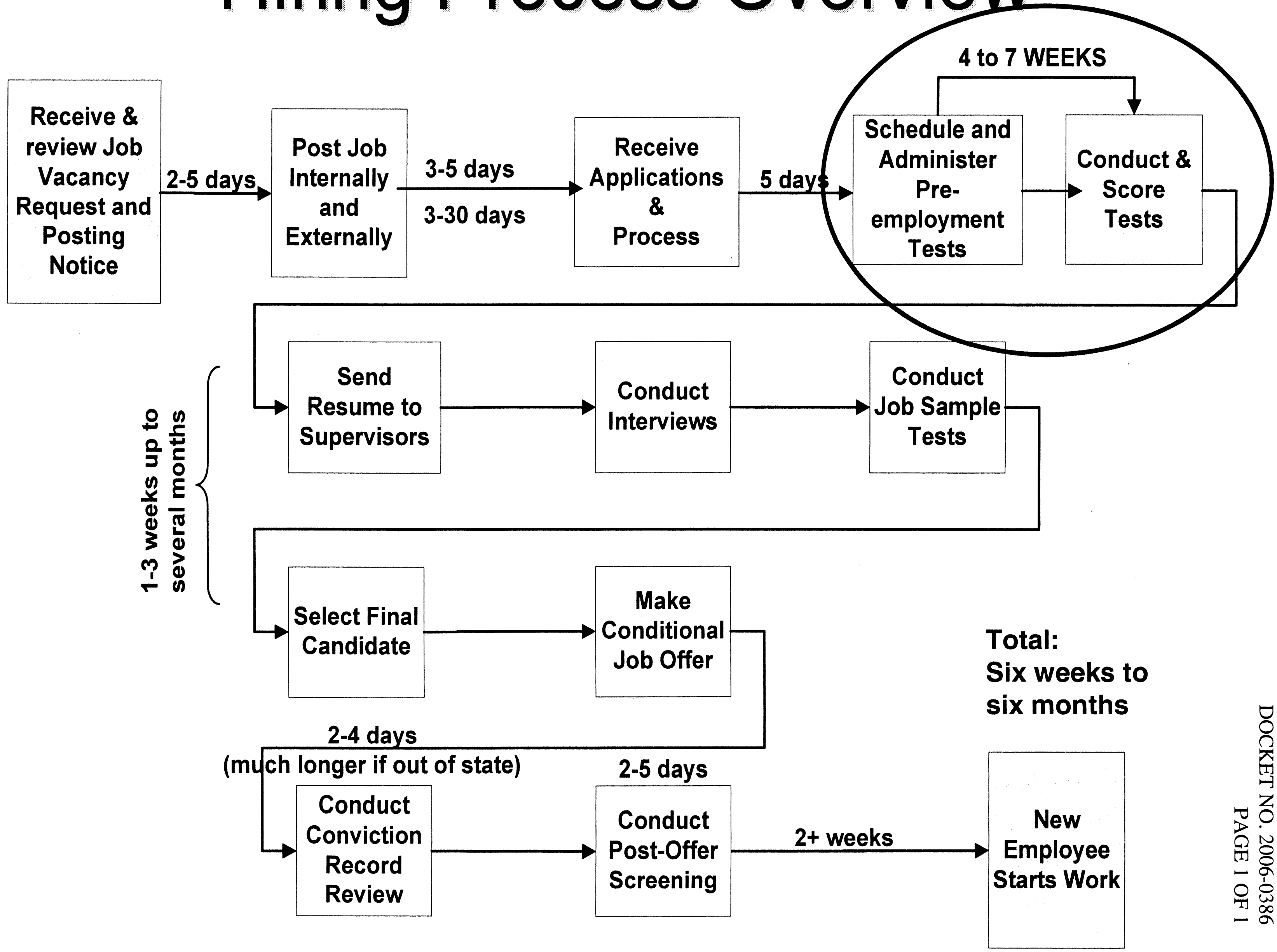


Hawaiian Electric Company, Inc.
Summary Recorded and Average Number of Employees

	A	B	C	D	E	F	G	H
	2004 Recorded EOY*	2004 Average	2005 Recorded EOY	2005 Average	2006 YTD Recorded 9/30/06	2006 Projected EOY	2007 EOY Test Year	**2007 TEST YEAR Average**
President's Office								
Corporate Audit & Compliance (Formerly Internal Audit)	6	6	11	8	11	9	12	**12**
President's Office	4	3	5	5	2	2	5	**5**
Subtotal	10	9	16	13	13	11	17	**17**
VP-Corporate Excellence								
Compensation & Benefits	14	14	13	14	12	13	15	**15**
Industrial Relations	9	9	9	9	9	9	9	**9**
Safety, Security & Facilities	52	42	44	49	46	42	47	**47**
Workforce Staffing & Development	17	16	16	17	17	16	17	**17**
VP-Corporate Excellence's Office	2	2	1	2	2	2	2	**2**
Subtotal	94	83	83	91	86	82	90	**90**
VP-Finance								
General Accounting	25	25	26	25	26	26	26	**26**
Information Technology & Services	90	90	95	94	92	95	94	**94**
Management Accounting & Fin Svcs	20	21	20	21	22	22	22	**22**
Risk Management	9	9	9	9	9	9	9	**9**
Financial VP/Treasurer's Office	3	3	3	3	4	4	3	**3**
Subtotal	147	148	153	152	153	156	154	**154**
VP-General Counsel								
Legal	16	14	16	16	15	16	16	**16**
VP-Gen Counsel's Office	2	2	2	2	2	2	2	**2**
Subtotal	18	16	18	18	17	18	18	**18**
Sr. VP-Energy Solutions*								
Customer Installations	43	0	49	46	46	44	53	**53**
Energy Projects	8	0	9	9	8	8	9	**9**
Technology	2	0	3	3	3	3	3	**3**
Sr. VP-Energy Solutions' Office	4	0	4	4	4	4	4	**4**
Subtotal	57	99	65	62	61	59	69	**69**
VP-Customer Solutions*								
Customer Technology Applications	9	0	8	9	8	8	10	**10**
Energy Services**	13	0	15	14	14	15	17	**17**
Forecasts & Research**	9	0	10	10	9	9	10	**10**
Integrated Resource Planning	4	0	5	4	5	5	6	**6**
Marketing Services	11	0	12	12	11	11	12	**12**
VP-Customer Solutions' Office	2	0	2	2	2	2	2	**2**
Subtotal	48	45	52	51	49	50	57	**57**
Sr. VP-Operations								
Customer Service	126	118	130	129	125	126	133	**131**
Sr. VP-Operations' Office	2	2	3	2	3	3	3	**3**
Subtotal	128	120	133	131	128	129	136	**134**
VP-Energy Delivery								
Construction & Maintenance	219	213	215	218	209	218	220	**220**
Engineering	79	79	86	85	85	84	85	**85**
Support Services	81	76	80	80	77	81	85	**85**
System Operation	100	96	112	107	108	105	117	**117**
VP-Energy Delivery's Office	2	3	2	2	2	2	2	**2**
Subtotal	481	467	495	492	481	490	509	**509**
VP-Power Supply								
Environmental	24	21	22	24	22	22	24	**24**
Power Supply Engineering (formerly Planning & Engineering)	41	46	41	42	37	40	46	**46**
Power Supply Operations & Maintenance	296	275	299	299	306	314	352	**352**
Power Supply Services	32	18	30	31	29	29	31	**31**
VP-Power Supply 's Office	2	2	2	2	2	2	2	**2**
Subtotal	395	362	394	398	396	407	455	**455**
VP-Special Projects	3	3	3	3	3	3	2	**2**
Sr. VP-Public Affairs								
Governmental Relations	3	3	3	3	3	2	3	**3**
Sr. VP-Public Affairs' Office	2	2	2	2	3	3	2	**2**
Subtotal	5	5	5	5	6	5	5	**5**
VP-Corporate Relations								
Corporate Communications	9	9	10	10	8	8	10	**10**
VP-Corporate Relations' Office	2	2	2	2	3	3	2	**2**
Subtotal	11	11	12	12	11	11	12	**12**
VP-Government & Community Affairs								
Education & Consumer Affairs	6	6	8	7	8	8	8	**8**
Regulatory Affairs	5	5	7	7	7	7	15	**11**
VP-Gov't & Comm Affairs' Office	7	5	7	7	7	7	7	**7**
Subtotal	18	16	22	21	22	22	30	**26**
						0		
Company Total	**1415**	**1384**	**1451**	**1449**	**1426**	**1443**	**1554**	**1548**

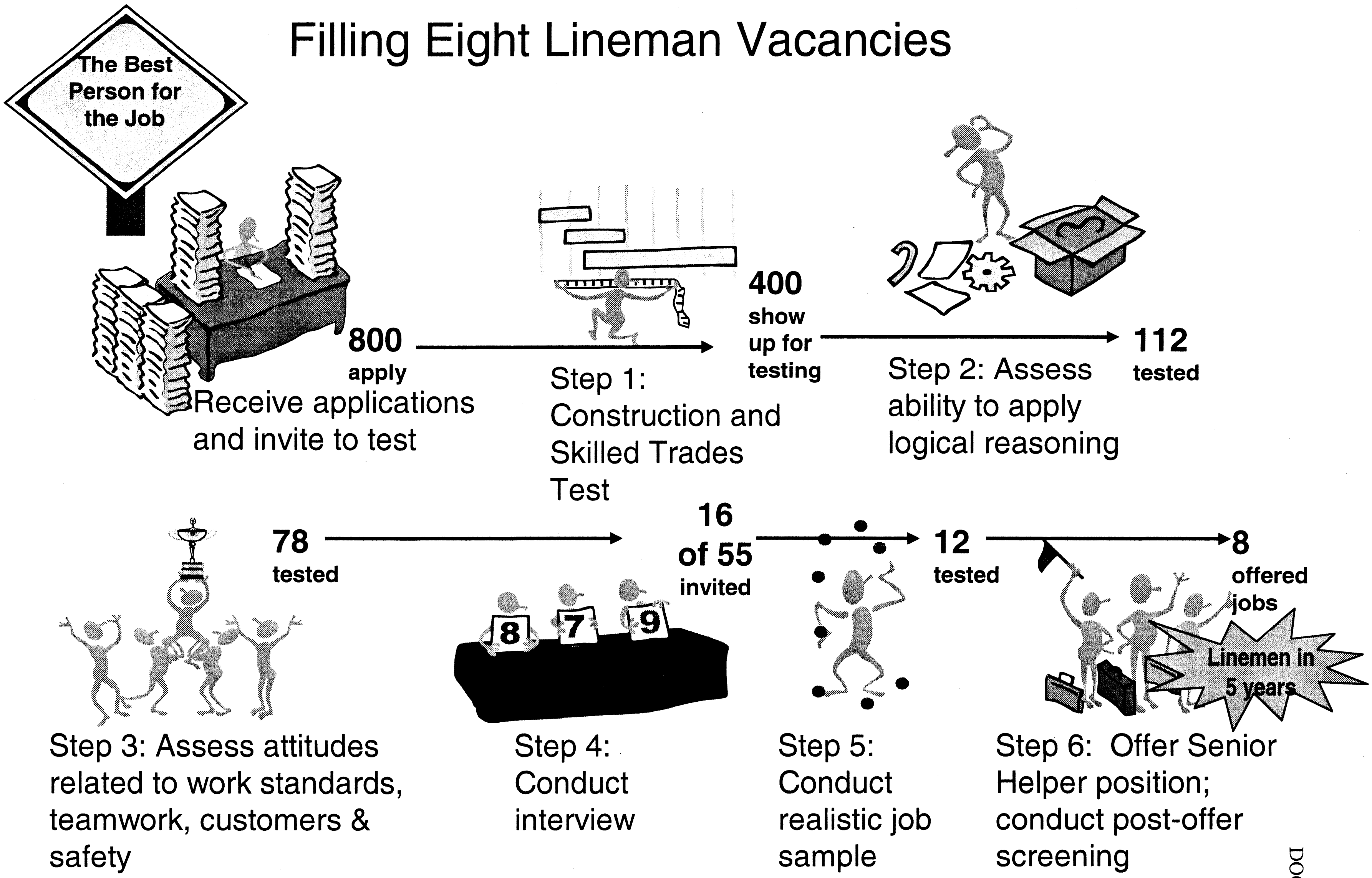
2004 Recorded EOY counts reflect reorganizations that occurred in 2004 after the 2005 test year filing; only process area averages are available
** Employee counts have been adjusted to exclude employees covered under the DSM surcharge adjustment docket from all years

Hiring Process Overview



HECO-1404
DOCKET NO. 2006-0386
PAGE 1 OF 1

Filling Eight Lineman Vacancies



HECO-1405
DOCKET NO. 2006-0386
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Programs to Accelerate Hiring

2002

- Business to Applicant (B2A) Phase II – Online screening questionnaire for external candidates via external vendor – helps hiring supervisors quickly identify candidates with requisite skills and experience

  - Internal application process & job posting: supervisor can track responses and has access to view/print resumes on line.
- Internal electronic forms filing and job posting process – saves 95 hours per year; reduced errors
- Improved Workforce Excellence Skills Rating Definitions help to better define desired non-technical skills

2003

- Business to Applicant Phase III – Establish "Careers" site on HECO.com; 8,000 visitors to Job Listings page in first three months; 50% increase in applicants for entry-level office and clerical positions

2004

- Reinstate Summer Intern program: 17 interns hired; in 2005, 5 of them were later hired into regular positions, 3 filled critical utility skills positions
- Conducted Mass Testing sessions at the Convention Center to create candidate pools for BU jobs
- B2A Phase IV – On-line external applications and test results; 33 hours and $12.8K savings
- Formalized Talent Assessment & Dev Process: succession candidates identified for all Executive positions; 80% Manager positions; 80% Facilitator/Supervisor positions; 30% other critical skill positions

2005

- Reestablish Project Aide/Intern (beyond summer) program – 8 of 22 2005 summer interns are hired into regular or Project Aide/Intern positions, 2 filled critical utility skills positions
- "Branding" as employer of choice – new print ads; 76,831 visitors to "Job Listing" site; 65% of employees apply for positions on line; 100% of applicants for entry-level positions applied on-line enabling faster processing
- On-site testing at Job Fairs increased applicant show rate from 50% to 95%

2006

- Implement new Edison Electric Institute pre-employment tests (for utility specific positions) to improve quality and job fit of candidates
- Establish Beginning Engineer program to "grow" critical engineering skills and experience
- On-site job fair and testing at Power Plant
- HR Suite Project – improve transaction and applicant processing through technology
- Partner with Honolulu Community College and/or other similar companies for training programs

Hawaiian Electric Company, Inc.
Vacant Positions as of September 30, 2006
HECO T-14

Organization	2006 YTD Recorded 9/30/06	2007 EOY Test Year	Adjust for Mgmt Tsfs*	Management Transfers*	2007 EOY Test Year vs. Recorded	Replacement		New	
President's Office									
Corporate Audit & Compliance	11	12	0		1	Department Secretary	1		
President's Office	2	5	-2	Director, Strategic Initiatives tsf to VP, Finance; Corporate Secty tsf to SVP, Public Affairs	1	Executive Admin Assistant	1		
Subtotal	13	17	-2		2				
VP-Corporate Excellence									
Compensation & Benefits	12	15	0		3	Employee Benefits System Administrator, Pension Specialist, Admin Assistant	3		
Industrial Relations	9	9	0		0				
Safety, Security & Facilities	46	47	0		1			Facilities Building Technician	1
Workforce Staffing & Development	17	17	0		0				
VP-Corporate Excellence's Office	2	2	0		0				
Subtotal	86	90	0		4				
VP-Finance									
Information Technology & Services	92	94	0		2	Developer Analyst (2)	2		
Management Accounting & Fin Svcs	22	22	0		0				
Risk Management	9	9	0		0				
Financial VP/Treasurer's Office	4	3	1	Director, Strategic Initiatives tsf from President's Office	0				
Subtotal	153	154	1		2				
VP-General Counsel									
Legal	15	16	0		1	Admin Assistant	1		
VP-Gen Counsel's Office	2	2	0		0				
Subtotal	17	18	0		1				
Sr. VP-Energy Solutions									
Customer Installations Dept.	46	53	0		7	Jr. Customer Planner (3), Jr. Drafter, Meter Engineer, Clerk Typist	6	Field Coordinator	1
Energy Projects	8	9	0		1	Sr Technical Svcs Engineer	1		
Energy Services	0	0	0		0				
Integrated Resource Planning	0	0	0		0				
Technology	3	3	0		0				
Sr. VP-Energy Solutions' Office	4	4	0		0				
Subtotal	61	69	0		8				
VP-Customer Solutions									
VP-Customer Solutions' Office	2	2	0		0				
Sr. VP-Operations									
Sr. VP-Operations' Office	3	3	0		0				
VP-Energy Delivery									
VP-Energy Delivery's Office	2	2	0		0				
VP-Power Supply									
VP-Power Supply 's Office	2	2	0		0				
VP-Special Projects	3	2	1	Dir, New Dispatch Office Project will transfer to System Operations in 2007	0				
Sr. VP-Public Affairs									
Governmental Relations	3	3	0		0				
Sr. VP-Public Affairs' Office	3	2	1	Corporate Secretary tsf from President's Office	0				
Subtotal	6	5	1		0				
VP-Corporate Relations									
Corporate Communications	8	10	-1	Sr. Comm. Consultant tsf to VP Corp Relns	1	Sr. Communication Consultant	1		
VP-Corporate Relations' Office	3	2	1	Sr. Comm. Consultant tsf from Corp Comm	0				
Subtotal	11	12	0		1				
VP-Government & Community Affairs									
Education & Consumer Affairs	8	8	0		0				
Government Relations	0	0	0		0				
Regulatory Affairs	7	15	0		8	Analyst	1	Manager, Director; Analyst (4); Admin Assistant	7
VP-Gov't & Comm Affairs' Office	7	7	0		0				
Subtotal	22	30	0		8				
				Total Vacancies in T -14:	26		17		9

* Transfers of employees/positions from one responsibility area to another and resulting in no overall increase or decrease in employee count.

HECO T-15
DOCKET NO. 2006-0386

TESTIMONY OF
LON K.OKADA

MANAGER
CORPORATE TAXES
HAWAIIAN ELECTRIC INDUSTRIES, INC.

Subject: Taxes Other Than Income Taxes
Income Tax Expense
Unamortized Net SFAS 109 Regulatory Asset
Unamortized Investment Tax Credits
Accumulated Deferred Income Taxes
Recent Tax Developments

INTRODUCTION

Q. Please state your name and business address.

A. My name is Lon K. Okada and my business address is 900 Richards Street, Honolulu, Hawaii.

Q. By whom are you employed and in what capacity?

A. I am the Manager of Corporate Taxes for Hawaiian Electric Industries, Inc. ("HEI"). HECO-1500 provides my educational background and work experience.

Q. What is your area of responsibility in this proceeding?

A. My testimony will cover the following areas for the 2007 test year for Hawaiian Electric Company, Inc. ("HECO" or "Company"):

1) Taxes Other Than Income Taxes,
2) Income Tax Expense,
3) Unamortized Net SFAS 109 Regulatory Asset,
4) Unamortized Investment Tax Credits,
5) Accumulated Deferred Income Taxes, and
6) Recent Tax Developments.

TAXES OTHER THAN INCOME TAXES

Q. What are the specific taxes included in "Taxes Other than Income Taxes"?

A. The following six taxes included in this category are related either to payroll or to utility revenue:

1) The Federal Insurance Contribution Act and Medicare ("FICA/Medicare") taxes,
2) The Federal Unemployment ("FUTA") tax,
3) The State Unemployment ("SUTA") tax,
4) The State Public Service Company ("PSC") tax,

5) The State Public Utility ("PUC") fee, and

6) The County Franchise Royalty tax.

The amounts included in the 2007 test year operating expenses as "Taxes Other than Income Taxes" are delineated on HECO-1501.

Under present rates, the 2007 test year estimate for Taxes Other Than Income Taxes is $126,151,000. Under current effective rates, the 2007 test year estimate for Taxes Other Than Income Taxes is $130,761,000. Under proposed rates, the 2007 test year estimate for Taxes Other Than Income Taxes is $139,578,000.

Q. What is the 2007 test year FICA/Medicare tax expense?

A. The Company's 2007 test year FICA/Medicare tax expense is $6,325,000.

Q. How is this amount determined?

A. The test year FICA/Medicare tax expense includes two elements, the FICA portion and the Medicare portion. Both are based on taxable wages, but the FICA wage base is limited by a maximum per employee while the Medicare wage base is unlimited.

For the 2007 test year, the FICA portion of the tax has a per employee maximum taxable wage base of $97,500 at a rate of 6.2%. The Medicare portion of the tax for 2007 is based on a rate of 1.45% with no wage base limitation. The test year estimate of FICA/Medicare taxes was obtained by applying the effective tax rates actually experienced by HECO for each pay period in 2005 to the 2007 test year estimates of gross pay by pay period. The tax rates trend downward as the year progresses as employees reach the FICA maximum wage base. See HECO-WP-1501, page 3 for the calculation of the FICA/Medicare taxes.

Q. How is the total FICA/Medicare tax allocated to operations, capital projects and billable projects?

A. The total FICA/Medicare tax is calculated and then allocated amongst operations, capital projects and billable projects based on the estimated division of labor charges to these three categories. See HECO-WP-1501, page 2. The amount allocated to operating expenses is included in Taxes Other than Income Taxes.

The amount allocated to capital projects represents charges to construction work in progress that eventually are closed to plant in service. The cost of these payroll taxes is recovered through the depreciation of plant in service. The amount allocated to billable projects is assumed to be recovered through outside billings to third parties with no net cost or benefit to the Company.

Q. Why is this allocation methodology reasonable?

A. As previously explained, total FICA/Medicare tax is equal to the applicable tax rate times test year wages. These wages are essentially equivalent to total labor charges. Therefore, allocating FICA/Medicare tax charges according to where labor is charged is a reasonable method of allocation. This methodology was used by the Commission in HECO's last general rate case Interim Decision and Order ("D&O") No. 22050 (September 27, 2005) in Docket No. 04-0113 and approved by the Commission in D&O No. 14412 (December 11, 1995) in Docket No. 7766.

Q. What is the 2007 test year FUTA tax expense?

A. The Company's FUTA tax expense for the 2007 test year is $61,000 as shown on HECO-1501.

Q. How is this amount determined?

A. These amounts are based on a taxable wage base of $7,000 per employee and a net tax rate of 0.8% in accordance with Internal Revenue Code §3301 and §3302. The allocation of this tax cost between operations, capital, and billable projects is identical to the methodology used for the FICA/Medicare tax explained above. This methodology was used by HECO in Docket No. 04-0113 and accepted by the Commission in its Interim D & O No. 22050 in determining HECO's revenue requirements.

Q. What is the 2007 test year SUTA tax expense?

A. The Company's SUTA tax expense for the 2007 test year was estimated to be $43,000 as shown on HECO-1501. The Company's test year estimate was based on a rate of 0.11% and a wage base of $35,700. The rate and taxable base are determined annually by the State of Hawaii Department of Labor and Industrial Relations, and the rate is based on a ratio determined by the Company's latest three year average taxable payroll and accumulated reserve.

Q. How did the Company estimate the 2007 test year base and rate?

A. The test year base of $35,700 was estimated by starting with the State-approved 2006 base of $34,000 and adding $1,700, which is the increase in base experienced between 2005 and 2006. This increase is reasonable in light of the State's recent history of progressively larger increases year over year, and in the last eight years there was only one instance where the SUTA taxable base decreased. The company estimated that the 2007 rate would be identical to the 2006 approved rate of 0.11%.

Q. What is the 2007 test year PSC tax expense?

A. Under present rates, the PSC tax expense for the 2007 test year is $79,354,000. Under current effective rates, the PSC tax expense for the 2007 test year is $82,408,000. Under proposed rates, the PSC tax expense for the 2007 test year is $88,261,000.

Q. How is the PSC tax determined?

A. The tax is imposed on the gross utility revenues (less a deduction for estimated worthless accounts) of the Company at a base rate of 5.885% in accordance with Hawaii Revised Statutes ("HRS") §239-5. The tax rate increases by an incremental percentage if the ratio of PSC net income to PSC gross taxable revenue is in excess of 15%. However, in recent years, the Company's ratio has been below the 15% threshold. The test year's ratio will also be less than 15% based on the projected PSC net income to PSC gross taxable revenue ratio. Accordingly, the Company has applied the 5.885% minimum rate in calculating its test year PSC tax expense. HRS §239-5 also provides that the tax in excess of the tax at 4% will be paid to the County in which the Company generates its taxable revenue. In this case, the excess calculated at the rate of 1.885% will be the portion owed to the City and County of Honolulu. HECO has used the 5.885% rate to calculate test year PSC tax expense in its recent rate cases.

Q. What is the 2007 test year PUC fee expense?

A. Under present rates, the 2007 test year PUC fee expense is $6,742,000. Under current effective rates, the 2007 test year PUC fee expense is $7,002,000. Under proposed rates, the 2007 test year PUC fee expense is $7,499,000.

Q. How is the PUC fee determined?

A. The fee is determined by multiplying gross utility revenues (less a deduction for estimated worthless accounts) by a statutory semiannual rate of .25%, or .5% annually as set forth in HRS §269-30(b).

Q. What is the 2007 test year Franchise Royalty tax expense?

A. Under present rates, the 2007 test year Franchise Royalty tax expense is $33,626,000. Under current effective rates, the 2007 test year Franchise Royalty tax expense is $34,922,000. Under proposed rates, the 2007 test year Franchise

Royalty tax expense is $37,389,000.

Q. How is the Franchise Royalty tax determined?

A. The Franchise Royalty tax is computed by multiplying gross receipts from the sale of electricity (less a deduction for estimated worthless accounts) by a rate of 2.5% in accordance with HECO's franchise and HRS §240-1.

INCOME TAX EXPENSE

Q. What is the 2007 test year income tax expense?

A. Under present rates, the 2007 test year income tax expense is ($4,107,000). See HECO-1502, page 1. Under current effective rates, the 2007 test year income tax expense is $14,292,000. See HECO-1502, page 2. Under proposed rates, the 2007 test year income tax expense is $49,559,000. See HECO-1502, page 1. Both calculations of income taxes at present and proposed rates utilize a top composite rate of 38.9097744%. This rate assumes the top marginal federal income tax rate of 35% and a state income tax rate of 6.4%. This combined rate became effective as of January 1, 1993 after the Revenue Reconciliation Act of 1993. The calculations are shown on HECO-WP-1502, page 1.

Q. What method did HECO use to compute the test year income tax expense?

A. HECO calculated the test year income tax expense based on the "short form" method that the Commission has consistently adopted in previous rate cases, including HECO's last general rate case Interim D&O No. 22050 (September 27, 2005) in Docket 04-0113 and D&O No. 14412 (December 11,1995) in Docket No. 7766.

“Short Form” Income Tax Methodology

Q. What is the "short form" method of calculating income tax expense?

A. The "short form" method is used for ratemaking purposes and calculates the total income tax expense in one step. It does not calculate the current and deferred components of income tax expense separately.

Q. Why is the "short form" method used?

A. This method simplifies the calculation of income tax expense and was used as the income tax calculation methodology for ratemaking purposes in recent rate case decisions for HECO, HELCO and MECO.

Q. How does the "short form" method simplify the calculation of income tax expense?

A. The "short form" method simplifies the calculation of income tax expense by utilizing net operating income before income taxes, with certain adjustments which are explained below. This adjusted net operating income is the taxable income for ratemaking purposes.

Taxable income for ratemaking purposes is multiplied by the composite federal/state income tax rate of 38.9097744%. This resulting amount is the income tax expense utilized in deriving net operating income for ratemaking purposes.

<u>Adjustments to Derive Taxable Income for Ratemaking Purposes</u>

Q. Please explain the calculation of net operating income before income taxes?

A. Net operating income before income taxes is equal to operating revenues less operation and maintenance expenses, depreciation expense, amortization of state capital goods credit ("state ITC"), taxes other than income taxes and interest expense on customer deposits from total operating revenues.

Q. What types of adjustments are made to net operating income before income taxes to derive test year taxable income for ratemaking purposes?

A. There are two categories of adjustments:

1) Interest expense related to operations, and

2) Permanent book/tax differences.

Q. Why does interest expense related to operations reduce taxable income for the calculation of income taxes?

A. For ratemaking purposes, interest expense related to operations is recovered in rates as a component of the allowed rate of return on rate base (specifically, the debt rate embedded in the weighted cost of capital) which is expressed on a pretax basis. The interest component, however, is tax deductible and must therefore be included in the calculation of income tax expense in order to account for the tax benefit related to the deductible interest.

Q. What is the 2007 test year interest expense?

A. The 2007 test year interest expense is $30,587,000, as shown on HECO-1502, page 1.

Q. How is this interest expense calculated?

A. The 2007 test year interest expense of $30,587,000 is calculated based on the same methodology used by both HECO and the Consumer Advocate in Docket Nos. 04-0113 and 7766 and used by the Commission in determining HECO's revenue requirements in those dockets.

This method estimates the amount of interest expense by calculating the interest on the long-term debt and hybrid securities actually in place and on the estimated additional long-term debt and short-term debt to be required in the test year. This total interest is then reduced by the debt portion of the Allowance for Funds used during Construction ("AFUDC") for the year as shown on HECO-WP-1502, page 2.

Q. How is the adjustment for the debt portion of AFUDC calculated?

A. AFUDC is the calculated cost of funds used for the construction of utility assets. AFUDC is comprised of a debt and equity portion, and in accordance with Statement on Financial Accounting Standards ("SFAS") No. 109, the Company computes AFUDC on a pretax basis. The debt portion of AFUDC reflects interest related to construction on a pretax basis and represents the tax deductible component of AFUDC, which is capitalized to plant. The adjustment, representing the debt component, carves out the interest expense related to construction, leaving the interest expense related to operations.

Q. Why is it necessary to reduce interest expense by the debt portion of AFUDC in computing the interest deduction in the income tax calculation?

A. The pretax debt portion of AFUDC represents the amount of estimated interest expense related to the construction of capital assets and should not impact the test year results of operations. This AFUDC is capitalized as part of the construction cost of those capital assets. The Company recovers these capitalized costs, including AFUDC, through future depreciation expense and the related tax benefits flow through to the customers in future years. Thus, the debt portion of AFUDC must be excluded from the interest deducted in the calculation of income tax expense to avoid double counting these income tax benefits.

Q. What are "permanent book/tax differences"?

A. Permanent book/tax differences are items that are recognized in the calculation of regulatory and book net income that will never be recognized in taxable income <u>or</u> vice versa.

Q. What is the total amount of the "permanent book/tax differences" accounted for in 2007 test year?

A. For the 2007 test year, the permanent book/tax difference totaled $81,000 as shown on HECO-WP-1502, page 3.

Q. What permanent book/tax differences are reflected in determining HECO's 2007 test year income tax expense?

A. For the 2007 test year, the only permanent book/tax difference relates to meals and entertainment expenses. Such amounts are reasonable costs of doing business. However, only 50% of these expenses are deductible for tax purposes and recognized in the calculation of taxable income. This is consistent with the determination of income taxes in prior rate cases, including Docket No. 04-0113. See HECO WP-1502, page 3, for the calculation of the meals and entertainment disallowance.

Accounting for the State Capital Goods Excise Tax Credit

Q. What is the 2007 test year amortization of state capital goods excise tax credits?

A. The 2007 test year amortization of the state capital goods excise tax credit ("state ITC") is $1,321,000. See HECO-1504.

Q. What is the state ITC?

A. The state ITC was enacted in 1987 under HRS §235-110.7 and was designed to mirror the qualification rules of the old federal investment tax credit ("ITC"). The four percent credit applies to qualifying equipment purchased and placed into service by businesses in Hawaii.

For book and ratemaking purposes, the credit is deferred in the year earned and subsequently amortized over the estimated useful life of the associated asset as was done with the federal ITC. The amortization on new additions begins when the book depreciation commences on those additions.

Q. How does the 2007 test year presentation of the amortization of the state ITC differ from past rate case presentations?

A. In past rate cases, the net amortization of the state ITC was included as an adjustment to income tax expense. It was shown net of federal and state tax effects because state ITC is effectively taxable for federal and state income tax purposes. Since the amortization of state ITC reduced the state income tax expense, the federal and state income tax effect relating to the state ITC was isolated, and directly offset the credit.

The current presentation yields the same net income result but is presented gross of taxes as a pretax amortization of the state ITC in operating income for ratemaking purposes. The federal and state income tax expense related to the state ITC is calculated and included in income tax expense. The current presentation is used as it is more consistent with the financial presentation under SFAS 109 described below.

Impact of SFAS 109

Q. How does the Company's adoption of SFAS 109 alter the short form method calculation?

A. HECO began accounting for income taxes under SFAS 109 in 1993. As explained in HECO T-12 in Docket No. 7700, accounting for income taxes under SFAS 109 simplifies the presentation of the short form calculation by eliminating the need for adjustments to income tax expense previously required to account for certain temporary differences between operating income for ratemaking purposes and taxable income.

The adoption of SFAS 109, which supersedes the old guidelines under Accounting Principles Board Standard ("APB") 11, does not change HECO's revenue requirements. The impact on revenue requirements and rate base were explained in Docket Nos. 7700 and 7766 and accepted by the Commission in the respective D&O No. 13704 at pages 50-53 and D&O No. 14412 at page 42.

Accounting for Federal Investment Tax Credit

Q. What is the 2007 test year amortization of federal ITC?

A. The 2007 test year amortization of federal ITC ("ITC") is $764,000. See HECO-1503. For ratemaking purposes, the credits earned and taken in prior years' income tax returns are amortized over 30 years, which is the approximate composite useful life of the assets giving rise to the credits. The amortization of ITC (formerly included as an adjustment to income tax expense prior to SFAS 109) is now included as an adjustment in determining depreciation expense. See HECO-1308.

Q. What is the 2007 test year amortization of the regulatory liability related to federal ITC?

A. The 2007 test year amortization of the regulatory liability related to federal ITC is $487,000. See HECO-WP-1506.

Q. What is the relationship between federal ITC and this regulatory liability?

A. As mandated by SFAS 109, Accounting for Income Taxes, the regulatory liability represents the "gross-up" for the tax effect of the ITC amortization and the tax on tax. See HECO-WP-1506. The amortization of the regulatory liability (credit to depreciation expense) has no impact on revenue requirements or net income because this amortization is offset by a corresponding increase (debit) to deferred income tax expense. The regulatory liability is amortized over the same period as the related federal ITC.

Q. How is the amortization of federal ITC treated?

A. Under SFAS 109, the amortization of federal ITC is considered a temporary difference on which a deferred tax must be provided. A regulatory liability is established as the equal and offsetting credit to the deferred income tax asset. This is an artificial creation of SFAS 109 since federal ITC never entered into the computation of taxable income for federal income tax return purposes. Federal ITC was a credit (as opposed to a deduction) that reduced the calculated income tax liability, dollar for dollar.

Consequently, the amortization of this regulatory liability increases net operating income by the identical amount of income tax expense calculated on the combined amortization of ITC and the related regulatory liability. The amortization of the regulatory liability and the additional income tax expense are equal and offsetting, resulting in the same revenue requirements impact of federal ITC before SFAS 109. In the 2007 test year, the debit to the regulatory liability of $487,000 offsets the credit to the Federal ITC deferred tax asset of $487,000. These amounts can be verified by taking the change in the year-end balances of the regulatory liability and the Federal ITC deferred tax asset. See HECO-1507.

UNAMORTIZED NET SFAS 109 REGULATORY ASSET

Q. What is the 2007 test year average net unamortized SFAS 109 regulatory asset?

A. The 2007 test year average unamortized net SFAS 109 regulatory asset is $54,628,000 as shown on HECO-1506, page 2. This represents the "gross up" of taxes required under SFAS 109. The equal and offsetting accumulated deferred income tax liabilities were provided as illustrated on HECO-1507.

Q. How was the 2007 test year average net unamortized SFAS 109 regulatory asset calculated?

A. The Company calculated this amount by taking the average of the SFAS 109 regulatory asset at the beginning and end of the test year. The balance at the beginning of the test year is the recorded net SFAS 109 regulatory asset as of

December 31, 2006. The balance at the end of the test year was derived by utilizing the recorded net SFAS 109 regulatory asset as of December 31, 2006, reducing it by the 2007 test year estimate of the amortization of the net regulatory asset and adding the 2007 test year estimate of the gross up of AFUDC equity incurred.

Excess Deferred Income Taxes

Q. How does the Company's adoption of SFAS 109 alter the presentation of excess deferred income taxes?

A. SFAS 109 requires that deferred tax liabilities and assets be established to reflect changes in income tax rates. Consequently, the income tax rate reduction enacted by the 1986 Tax Reform Act ("TRA") required an adjustment to the Company's deferred income tax balance as of January 1, 1993. Consistent with SFAS 109's focus on the balance sheet, the portion of the deferred tax balance (established prior to 1987 at higher rates) in excess of that which is required to satisfy future tax liabilities at the 1986 TRA 34% rate represents excess deferred taxes. This excess was carved out and classified as a regulatory liability.

In addition, the amount carved out as a regulatory liability was grossed up to reflect the fact that the amortization of this regulatory liability represents current and future revenue reductions which have a related tax effect. Mechanically, this is accomplished by computing the tax effect of the regulatory liability plus the tax thereon (i.e., tax on tax). The "gross up" amount serves to increase the regulatory liability with an equal and offsetting debit to accumulated deferred income tax liability.

Q. How does the SFAS 109 book treatment affect the ratemaking presentation of excess deferred income taxes?

A. Because the future financial statement impact of the excess deferred taxes is now reflected in the resulting regulatory liability, the reduction of test year income tax expense is now accomplished in two pieces: 1) through the amortization of the "grossed up" regulatory liability included in operating income and 2) the income taxes calculated on the amortization. For ratemaking purposes, the net operating income impact is equivalent to the former adjustment to income tax expense for excess deferred taxes in the calculation of income tax expense.

Q. What is the 2007 test year amortization of the regulatory liability related to excess deferred income taxes?

A. The 2007 test year amortization of the regulatory liability related to excess deferred taxes is $962,000. See HECO-1506, page 2. This amount was calculated by determining that amount of excess deferred income tax benefit flowing back to ratepayers. This is consistent with the treatment of excess deferred taxes in Docket Nos. 04-0113 and 7766.

Q. Please describe the background of excess deferred income taxes and the methodology used in determining the flow back.

A. The TRA of 1986 contained a provision which reduced the top corporate income tax rate from 46% to 40% in 1987 and to 34% in 1988 and subsequent years. In years prior to 1987, deferred income taxes were calculated and established at the then current 46% rate under the assumption that the taxes would be paid at the higher 46% rate in the future when the underlying timing differences "turned around."

The change to these lower rates created the excess deferred taxes, and the law required that regulated utilities normalize those excess deferred income taxes related to accelerated depreciation. Under SFAS 109, the amortization of the regulatory liability accomplishes what was previously accomplished via the amortization of excess deferred taxes, and accordingly, the methodology for the amortization of this regulatory liability closely follows the methodology previously used for excess deferred taxes.

Q. How was the amortization of the regulatory liability related to excess deferred income taxes calculated?

A. The amortization of the regulatory liability related to the excess deferred taxes can be divided into two categories. The first category deals with excess deferred taxes related to accelerated depreciation in account 282. The second category includes excess deferred taxes in account 283, which are for all items other than accelerated depreciation.

Under the 1986 TRA, regulated companies must use the average rate assumption method in calculating the normalized amount of excess deferred taxes related to accelerated depreciation for all vintages subject to the normalization rules of the tax code. SFAS 109 does not change the normalization requirement contained in the TRA of 1986.

The average rate assumption method is used for all vintages after 1970. Excess deferred taxes related to accelerated depreciation on pre-1971 vintages were completely amortized by 1993.

Q. How does the Company calculate the amortization of the regulatory liability related to all other excess deferred income taxes other than those related to accelerated depreciation?

A. The regulatory liability related to all other excess deferred taxes other than those related to accelerated depreciation is being amortized over the estimated remaining life of the underlying timing differences. This amortization method was used in HECO's previous rate cases including Docket Nos. 04-0113 and 7766. The amortization of the regulatory liability, under SFAS 109, has the same effect and result on revenue requirements as the amortization of excess deferred income taxes under the superseded APB 11.

Q. Why are the revenue requirements the same under the old and new accounting rules?

A. Under the old APB 11 rules, excess deferred income taxes were treated as a direct adjustment to income tax expense, and the amortization of excess deferred income taxes reduced income tax expense dollar for dollar.

Under SFAS 109, the grossed up excess deferred income taxes are amortized into operating income, and income taxes are calculated on that amortization. The impact on operating income is exactly the same as under APB 11 since the grossed up number net of its tax effect is equal to the excess deferred tax amortization before gross up.

Q. How does the Company's adoption of SFAS 109 impact rate base?

A. SFAS 109 has no impact on rate base. Although SFAS 109 requires HECO to establish certain tax-related regulatory assets and liabilities, equal and offsetting increases are made to accumulated deferred income taxes.

Q. How does the Company handle the amortization of excess state deferred income taxes?

A. HECO amortizes state excess deferred income taxes in the same manner as federal excess deferred taxes.

<u>Deficit Deferred Income Taxes</u>

Q. How does the 1993 Omnibus Budget Reconciliation Act ("1993 Tax Act") affect the deferred income tax balances for the 2007 test year?

A. The 1993 Tax Act increased the income tax rate by one percent, from 34% to 35%. As a result, the federal deferred income tax liability balances were deficient by that one percent since the underlying temporary differences are expected to reverse at the current 35% rate.

Q. What does SFAS 109 require in this instance where the income tax rate increases?

A. Under SFAS 109's balance sheet orientation, HECO must provide the additional deferred income taxes to cover this one percent deficit since the deferred tax liability balances were adjusted at the beginning of 1993 to provide for future taxes at the lower 34% rate.

Q. What accounting adjustments were made upon the enactment of the higher 1993 income tax rate?

A. Consistent with the treatment of excess deferred income taxes, the one percent deficit deferred tax was calculated and grossed up for the tax on tax effect. This amount was then set up as additional deferred income tax liability with an offsetting regulatory asset. In effect, this adjustment reinstates a portion of the excess deferred income taxes, previously carved out and placed into the regulatory liability account.

Q. What is the 2007 test year amortization of the regulatory asset related to deficit deferred income taxes?

A. The 2007 test year amortization of the regulatory asset related to deficit deferred income taxes is ($111,000). See HECO-1506, page 2. This amount was calculated using a method similar to how excess deferred taxes were computed.

Q. Why is the amortization of the regulatory asset related to deficit deferred taxes included in the depreciation expense calculation?

A. The amortization of this regulatory asset related to deficit deferred taxes is the converse of the amortization of the regulatory liability related to excess deferred taxes. Whereas excess deferred taxes resulted from the tax rate decrease contained in the TRA of 1986, deficit deferred taxes are caused by the tax rate increase contained in the 1993 Tax Act. This amortization has the effect of increasing cost of service for deferred taxes, which were established at a 34% rate upon the adoption of SFAS 109 at the beginning of 1993, in order to meet the expected future liability at the higher current rate of 35%.

UNAMORTIZED INVESTMENT TAX CREDITS

Q. What is the 2007 test year estimate of the average unamortized federal and state investment tax credits?

A. The 2007 test year estimate of the average unamortized investment tax credits is $29,680,000. See HECO-1504. The entire balance is made up of the state ITC. The federal ITC originating in years prior to 1971 was fully amortized as of December 31, 2000.

Q. How was the average unamortized investment tax credit for the 2007 test year calculated?

A. The Company calculated this amount by taking the average of the state ITC at the beginning and end of the test year. The balance at the beginning of the test year was derived by utilizing the recorded unamortized state ITC as of December 31, 2005 subtracting the 2006 estimated amortization of state ITC and adding the 2006 vintage estimated state ITC. The balance at the end of the test year was similarly derived by utilizing the comparable 2007 test year estimates of state ITC amortization and vintage additions. See HECO-1504.

Q. What is the Company's position regarding the regulatory treatment of benefits due to the State ITC?

A. Because there are no laws or regulations that require the sharing of the state ITC benefits between ratepayers and shareholders, the Company passes all of the benefits of the state ITC to the ratepayers. Thus, the unamortized balance serves to reduce rate base and the annual amortization reduces the income tax expense. This treatment of the state ITC benefit was used by the Commission in determining HECO's revenue requirement in prior rate cases, including Docket Nos. 04-0113 and 7766.

Q. How does the Ward photovoltaic project affect the 2007 test year balance of unamortized state ITC?

A. The 2007 test year includes the installation of the Ward photovoltaic (PV) project as explained by Mr. Dan Ching in HECO T-5. Photovoltaic energy systems are entitled to a state tax credit and therefore a credit in the amount of $500,000 was included as a 2007 test year addition to the unamortized state ITC balance. See HECO-1504. Although this credit is earned at a different rate and only on qualified PV property, the accounting for this credit is identical to the state ITC. Thus, the PV credit was included in unamortized state ITC for presentation purposes.

Q. How is the credit calculated?

A. The credit is calculated at a 35% rate on qualified photovoltaic property as defined in HRS §235-12.5, up to a maximum of $500,000 of credit per system. Based on the estimated qualified costs of $1.6 million, we estimated that the statutory maximum of $500,000 would be earned on the Ward PV project.

Q. What changes have occurred regarding the plans for the Ward PV project?

A. Currently, the plans for this project have changed, and instead of HECO ownership, the intent is to purchase the electricity produced by a third party owner of PV property. If these plans are realized, HECO will not be entitled to the state PV tax credit and no adjustment to state ITC will be necessary. See Mr. Dan Ching's testimony at HECO T-5 for further explanation.

ACCUMULATED DEFERRED INCOME TAXES

Q. What is the 2007 test year estimate of the average accumulated deferred income taxes ("ADIT")?

A. The 2007 test year estimate of the average ADIT is $155,081,000, as shown on HECO-1505, page 1.

Q. How does the ADIT balance affect rate base?

A. HECO's net positive ADIT balance (which is a liability credit) serves to reduce rate base.

Q. How did the Company calculate the average ADIT balance?

A. The Company calculated this amount by taking the average of the accumulated federal and state deferred tax balances at the beginning and end of the test year. The balance at the beginning of the test year was derived by utilizing the September 30, 2006 recorded deferred federal and state income tax balances and adding the estimated deferred income tax expense for the last three months ending December 31, 2006. The balance at the end of the test year was derived by utilizing the estimated deferred federal and state income tax balances as of December 31, 2006 and adding the estimated deferred income tax expense for the 2007 test year. Consistent with prior HECO rate cases, the deferred taxes for items excluded in determining HECO's revenue requirements in prior rate case decisions have been excluded from the deferred tax balance for the test year. See HECO-WP-1505.

Q. In HECO Docket 04-0113, the Company described a potential adjustment that may be required to ADIT as a result of its application to change its accounting method for allocating overhead costs to self-constructed assets. What is the status of the application with the Internal Revenue Service?

A. The application is still pending. As discussed in my testimony in HECO Docket No. 04-0113 (T-17, page 22 and RT-17, pages 11-14), the Company had a pending application with the Internal Revenue Service ("IRS") for accounting method changes related to the overhead costs allocated to self-constructed assets. The status of the application has not changed and the IRS has yet to issue any response to this application.

Q. Please summarize the history of this application with the IRS.

A. In early 2002, HECO (with the assistance of Deloitte and Touche LLP) submitted an application to the Internal Revenue Service ("IRS") requesting a change in the method of allocating certain overhead costs, which the IRS refers to as "mixed service costs," for income tax purposes. The Company refers to this accounting method as the "simplified service cost" method. In effect, the methodology affects the timing of the deduction for mixed service costs incurred in constructing certain "self-constructed" assets. The Company requested this change to be effective for the years ending on or after December 31, 2001.

Q. What was the effect of the method change on the Company's federal and state income tax returns?

A. To date, the method change has not resulted in any additional deductions and related tax benefits to the company in its filed returns. HECO filed a "manual" application for change, which contemplated 1) the request for the change, 2) an approval from the IRS and 3) the deduction being taken only after approval was granted. If approval was received after the original due date of the 2001 return, then the deduction would be taken on an amended return.

Q. What guidance has the IRS issued on the simplified service cost method?

A. Although the Company has not received any direct guidance, on August 29, 2005, the IRS issued Revenue Ruling 2005-53 ("Revenue Ruling"), which summarized the guidance in the form of regulations (T.D. 9217), issued on August 2, 2005, relating to the uniform capitalization rules of IRC §263A and the simplified service cost method.

Q. Please explain the IRS's position in the regulations issued.

A. The IRS confirmed that taxpayers are allowed to use the simplified service costs method to determine the aggregate portion of mixed service costs (overheads) incurred that are allocable to "eligible property." The IRS then clarified what types of property constituted "eligible property" for purposes of these rules.

Q. How does the IRS define eligible property in the revenue ruling and the new regulations?

A. As it relates to electric utilities, the IRS defines eligible property narrowly and basically carves out all generation, transmission and distribution property from the allocation base due to its long useful lives. In its ruling, the IRS states, "For purposes of the simplified methods under §1.263A-1(h)(2)(i)(D) and §1.263A-2(b)(2)(i)(D), a taxpayer's self-constructed assets are produced on a routine and repetitive basis in the ordinary course of business if the assets are either mass-produced ...or have a high degree of turnover." The IRS further explains that a high degree of turnover means that the costs of production are recovered (i.e., depreciated) over a relatively short period of time. They have designated three years or less to be the acceptable range for this short period of time.

Q. How does this narrow definition of eligible property affect HECO's potential adjustment?

A. HECO does not engage in any significant manufacturing activity, as defined by the IRS, and except for a few limited exceptions of relatively low value, HECO's utility assets have estimated useful lives of greater than three years. Consequently, HECO would have virtually no property eligible for the simplified service cost method. The new regulations also eliminate the applicability of this method prospectively for HECO, since the Regulations have the force and effect of law.

Q. How does the Revenue Ruling impact taxpayers under the simplified service cost method?

A. Generally, revenue rulings do not apply retroactively unless the ruling includes a specific statement indicating the extent to which it is to be applied without retroactive effect. The Revenue Ruling did not include such a statement and presumably applies retroactively. Taxpayers have no recourse on the application of the Revenue Ruling except to challenge its retroactivity.

Q. How does this impact the 2007 test year ADIT?

A. Based on the IRS guidance to date, the 2007 test year ADIT should not include any adjustment for the potential change in accounting method described above because the chances of receiving a favorable adjustment and refund for prior tax return liabilities are remote. In addition, even if the IRS should grant some or all of the method change adjustment, the new regulations would require that all the tax return benefits gleaned from the change be reversed and paid back by the tax year ending December 31, 2006.

Q. What other options are available to HECO in this regard?

A. In January 2006, the Company filed a protective application for change in accounting method to a facts and circumstances method for allocating overhead costs to self-constructed assets, effective for 2005. The Company and its consultants believe that this protective application will provide HECO more options in determining its prospective cost allocation method, at such time when the issues in the original application for the simplified service cost method are resolved. The Company filed its 2005 income tax return without making any adjustment for any new method since the adjustment is dependent on the resolution of the 2001 application for the simplified service cost method.

Q. What benefits will be derived by adopting this new method?

A. If any benefits are to be derived by the new method, the Company will have to file an amended income tax return to claim this adjustment when and if it is determinable from the resolution of the simplified service cost method issues and any guidance from the IRS. Due to these uncertainties, HECO cannot calculate the potential adjustment for 2007 and has not included any related revenue requirements impact of this potential facts and circumstances method in the test year.

RECENT TAX DEVELOPMENTS

The American Jobs Creation Act of 2004

Q. What changes in the tax law are applicable to HECO in 2007?

A. On October 22, 2004, President Bush signed the American Jobs Creation Act of 2004 ("2004 Act") into law. The new law is comprised of three major elements: 1) tax relief for U.S.-based manufacturing activities, 2) reforms in the taxation of multinational businesses and 3) approximately four dozen more targeted items of business income tax relief. The latter two elements have little impact on HECO's business, but the tax relief for U.S.-based manufacturing activities may have an impact on the Company.

Q. Please describe this provision.

A. The 2004 Act intends to provide tax relief for domestic manufacturers by providing a deduction based on a percentage of income from qualified activities. Eligible taxpayers may claim a 6% deduction from 2007 through 2009. The full 9% deduction is available in 2010 and thereafter.

Q. How does this affect HECO?

A. One of those qualified activities is the production of electricity. As an integrated producer of electricity, HECO generates and delivers electricity to customers. The 2004 Act specifies that only the production of electricity is an eligible activity, and income from the transmission or distribution of electricity will not qualify. Consequently, HECO will be able to take this new deduction as a percentage of income attributable only to the generation of electricity.

Q. How will the Company determine this income and segregate it from the income attributable to the Company's other activities?

A. Proposed regulations under IRC §199 were issued on October 20, 2005. The proposed regulations state that an integrated producer, such as HECO, that produces and delivers electricity, must allocate its gross receipts between (1) production, which qualifies as domestic production gross receipts ("DPGR"), and (2) distribution and transmission, which do not qualify as DPGR. Treasury Regulation §1.199-4 provides that cost of goods sold must be allocated specifically to the qualified gross receipts and all other indirect costs should be allocated or apportioned using the guidelines set forth in IRC §861. Based on this guidance and in conjunction with the preparation of the 2005 income tax returns, HECO calculated its qualified production activities income (QPAI) and concluded that it would not yield an IRC §199 deduction. No deduction was taken in the 2005 federal income tax return and we assumed no deduction in the test year.

Q. What additional guidance has the IRS given since the proposed regulations were issued and if so, has HECO changed its §199 computation?

A. The IRS issued final regulations on May 24, 2006 and the guidance given on what is DPGR has led HECO to change its computation. The change involves carving out the generation revenues received for that portion related to purchased power. Treasury regulation §1.199-3(a)(1)(iii) specifies that qualified production must be produced by the taxpayer and therefore revenues received to recover the cost of purchased power should be excluded from DPGR. Correspondingly, the related purchased power expenses should also be excluded from the calculation of QPAI (the base on which the % deduction is applied).

Q. What is the Company's estimate of the impact of IRC §199 on income tax expense?

A. Based on our last cost of service study for the 2005 test year, 75.2794% of total electric revenue was for the generation function. Using actual 2005 tax return information and factoring in the purchased power carve out, HECO did not qualify for a IRC §199 deduction since QPAI, or income related to HECO generation, was a loss. Based on the 2005 numbers, we estimate that HECO will not qualify in the 2007 test year. See HECO-WP-1502, pages 4-5. However, under the 2007 test year cost of service study, 83% of total electric revenue is attributed to the generation function. We have not had the opportunity to recalculate the §199 deduction under present and proposed rates in this direct submission, but the change in the generation allocation and the additional revenues at proposed rates may have an impact on our calculation.

The Energy Tax Incentives Act of 2005

Q. Please describe other recent legislation that may affect the computation of income taxes in this docket.

A. On August 8, 2005, President Bush signed the 2005 Energy Tax Act into law. Generally, the law contains $14.5 billion in tax cuts to effectuate domestic energy conservation at every level. The new law is comprised of four approaches to produce long-term, energy saving initiatives: 1) conservation, 2) development of alternative energy, 3) improving the U.S. energy infrastructure, and 4) production of domestic energy.

Q. How does the 2005 Energy Tax Act affect HECO in 2007?

A. The 2005 Energy Tax Act provides that certain property used in the transmission of 69 or more kilovolts (KVs) of electricity for sale be depreciated over a shorter 15-year period than the previously administratively established 20-year recovery period. This provision applies to property the original use of which begins after April 11, 2005. HECO has reflected this provision in its 2007 tax depreciation calculations and accumulated deferred tax liability.

The Pension Protection Act of 2006

Q. How has the passage of the Pension Protection Act of 2006 impacted the 2007 test year estimates?

A. The Pension Protection Act signed into law on August 17, 2006 primarily focused on individual retirement plans and provided for more flexibility in funding for one's retirement. Certain provisions affecting employer-sponsored plan funding have no effect on the 2007 test year pension costs since the funding provisions are effective in 2008.

FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes

Q. Please describe the newly issued FASB Interpretation No. 48 (FIN 48).

A. The Financial Accounting Standards Board (FASB) was concerned that FAS 109, Accounting for Income Taxes, provided no specific guidance on how to address uncertainty, resulting in diverse accounting practices in reporting the recognition, de-recognition and measurement of benefits related to income taxes. The FASB consequently issued FIN 48 in July 2006 with the objective of providing specific guidance in dealing with the uncertainty of determining and reporting income tax expense related to uncertain tax positions.

Q. How does FIN 48 affect the reporting of income taxes related to uncertain tax positions?

A. The objective of FIN 48 was to increase the relevance and comparability in financial reporting of income taxes; and consequently, it provides a two step evaluation process for all uncertain tax positions taken in filed income tax returns and planned to be taken in the current year's returns. Before taking these steps, a company must first identify all tax positions for which there may be some doubt as to its sustainability against challenge by tax authorities. Once these positions are identified, the two tiered analysis is performed.

Q. What is the first step in the FIN 48 evaluation?

A. For each uncertain tax position, the Company must decide whether it is "more likely than not" that the position will be sustained upon examination. Generally, the "more likely than not" standard equates to a greater than 50% probability of success by the taxpayer. If a position does not meet this threshold, then the benefit cannot be recognized and no further measurement analysis is necessary. The financial statement impact will be summarized below, covering the effects of recording a FIN 48 liability/asset.

If a position does meet the "more likely than not threshold," then the reporting entity goes to step two of the analysis process.

Q. What is entailed in step two of the FIN 48 evaluation?

A. Step two of the evaluation involves the determination of the amount of recognition on the financial statements. FIN 48 provides a procedure for computing that amount of benefit to be recorded for an uncertain position that has met the threshold in step one. It asks the company to identify the possible estimated dollar outcomes of the position, then to assess the probability of each possible outcome, starting with the most beneficial outcome to the least beneficial outcome. The cumulative probabilities would total 100%. The benefit recognized is that outcome at which the cumulative probabilities exceed 50%. This is best understood through example. Paragraph 21 of Appendix A of FIN 48 illustrates the calculation required in step two. See HECO-WP-1505, page 13.

Q. Once the amount of a FIN 48 liability/asset is determined in step two, what is the impact on the financial statements?

A. The FIN 48 adjustment represents management's quantification of the amount of liability or refundable that was not or will not be reflected in the company's income tax returns. The amount essentially represents a probability "discount" on the tax return positions and is based on the specific guidelines set forth under FIN 48.

Q. How does FIN 48 address the adjustments for positions that are temporary differences?

A. FIN 48 requires that the "discount" be segregated from a deferred income tax liability if the position has only timing consequences (a temporary difference for which deferred income taxes are provided). The balance sheet impact would be a reclassification between deferred income tax liabilities and "other tax liabilities."

Q. What is the impact of the adjustments for positions that are potentially permanent differences?

A. If the position is not of a temporary nature, then the adjustment would generally flow to the income statement as a tax expense or benefit (in the year of implementation, this adjustment will be reflected as a one-time adjustment to retained earnings).

Q. What other impacts does FIN 48 have on the financial statements?

A. Under FIN 48, a taxpayer is required to accrue interest and penalties for which, under relevant law, the taxpayer would be liable, based on the FIN 48 adjustment. FIN 48 allows the taxpayer to classify the interest and penalties as part of the FIN 48 tax liability or as discrete items separate from the taxes.

Q. How does the Company propose to treat these liabilities/assets created by the implementation of FIN 48 in the 2007 test year?

A. It is reasonable to treat these non-current tax liabilities/refundables as an adjustment to rate base, just as deferred income tax liabilities are treated. In most instances, the FIN 48 adjustment will lead to an increase in FIN 48 non-current tax liability and a corresponding decrease in deferred income tax liability. This is the case because generally, the differences between tax return reporting and FIN 48 will be temporary differences that do not affect the aggregate taxes paid over time but only affect the timing of when those taxes are paid. In these cases, the inclusion of the FIN 48 liability in rate base will keep rate base measurement consistent with pre-FIN 48.

Q. How does the Company propose to treat a FIN 48 liability or asset that is created by a permanent difference?

A. In a small number of cases, the FIN 48 adjustment may be derived from a permanent difference, which is an item of income or expense that is permanently included for book and not for tax, or vice versa. In this instance, the difference would not be temporary over time, and there would not be an offsetting entry to deferred income taxes. Consequently, the tax effect will flow through income as a non-cash item and rate base should not include the non-current liability or asset. The FIN 48 liability is similar to a deferred income tax in that our financial statements recognize this item creating additional income tax expense or benefit while our tax returns will not.

Q. Under what conditions would it be reasonable to include this FIN 48 liability in rate base?

A. The inclusion in rate base is reasonable only if the related expense or benefit is included as part of our cost of service for ratemaking purposes. This position is consistent with our established treatment of deferred income taxes.

Q. What is HECO's 2007 test year estimate of its FIN 48 adjustment?

A. HECO is in the process of evaluating its uncertain tax positions and their impact on the implementation of FIN 48, and the Company has not yet quantified the impact. Consequently, HECO has not included any potential effects of its FIN 48 implementation in the 2007 test year estimates of cost of service and rate base.

Hawaii General Excise Tax and Honolulu City and County Surcharge Tax

Q. Please describe the Honolulu City and County Surcharge tax.

A. Pursuant to the City & County of Honolulu's decision to enact a surcharge on the general excise tax (GET) described in HRS §237-8.6, the total rate of tax assessed on transactions subject to the surcharge and GET is 4.5%, a 0.5 increase over the existing rate. This will be effective January 1, 2007. See HECO-WP-1508, page

1-2.

Q. How does this surcharge affect the 2007 test year estimates?

A. The surcharge adds an additional 0.5% (or 0.712% for the tax on tax effect) tax to most third party vendor costs that are subject to the GET. See HECO-WP-1508, page 3. Consequently, a GET adjustment of $320,000 was added to O&M costs for the effect of the new surcharge on third party O&M expenses. See HECO-1508. A similar adjustment was made for fuel oil purchases and capital project costs incurred from third party vendors.

Q. Why was the GET increase not consolidated into the Company's detailed estimates of O&M expenses?

A. Although the statute was enacted and Honolulu County passed the enabling ordinance at the end of 2005, the State did not provide any guidelines on implementation of the surcharge until September and October 2006. These draft guidelines were issued after the process of estimating detail non-labor costs had begun and had been entered into the Pillar budgeting system. It was not practical to integrate the GET adjustment into the non-labor cost detail estimates, and therefore, the GET increase is presented as a separate line on the Results of Operations.

Q. How was the GET adjustment calculated?

A. The Company first identified those costs already subject to GET and then applied the GET increase of .5% to these costs, to arrive at the GET tax adjustment.

Q. How did the Company estimate the cost base subject to GET?

A. The Company started with total Direct O&M Non-Labor by expense elements. From that list, expense elements that were generally subject to GET were identified. For expense element 451, Information System Expense – Production and Development, the non-labor portion was estimated. For expense element 501, Outside Service – General, HECO excluded Emission Fees and Line Fees/Bank Fees, as those types of expenses are not subject to GET. The base amount was further adjusted to account for adjustments and normalizations. See HECO-1508.

Other Tax Changes

Q. For working cash purposes, what assumptions were made regarding the timing of the payment of estimated income taxes during the test year?

A. Based on proposed Treasury Regulations §1.6655-2 issued in December 2005, estimated taxes are expected to be paid on a more ratable basis than in prior years.

Q. Why do these regulations result in ratable estimated income tax payments?

A. The regulations provide guidance on how taxpayers should calculate their estimated income tax payments and more specifically, on the timing of the recognition of income and expenses incurred in the taxable year in the calculation of taxpayers' estimated taxable income. Based on these proposed rules, HECO will essentially lose the ability to accelerate its deduction of certain state taxes in the calculation of its estimated taxes in the first three quarters of the year. This will result in more level payments of estimated income taxes in each quarter of the taxable year.

Q. Why were income tax payments adjusted for both federal and state purposes when these proposed regulations are federal regulations?

A. Hawaii previously adopted IRC §6655(d) and (e), to which the proposed regulations relate. Consequently, the federal regulations would provide the same guidance to the Hawaii statute on calculating the required estimated income tax payments.

Q. Why did HECO apply the rules under these proposed regulations when they have not been finalized?

A. HECO used these new rules in developing its estimates of taxes paid in the 2007 test year because the expectation was that the regulations would be finalized in 2006. However, as of this writing, the proposed regulations have not been published as final regulations and the final rules and their effective date are still undetermined. In this light, HECO maintains that the amounts and timing of 2007 test year income tax payments are reasonable, but that any changes to our assumptions will be accounted for at the next opportunity should the need arise. Note that the IRS currently allows taxpayers to rely on the proposed regulations to avoid any penalties for underpayment

Q. Does this conclude your testimony?

A. Yes, it does.

LON K. OKADA

EDUCATION AND EXPERIENCE BACKGROUND

Business Address:	Hawaiian Electric Industries, Inc. 220 South King Street, Suite 1710 Honolulu, Hawaii 96813
Current Position:	Manager of Taxes (17 years)
Previous Positions:	Manager of Taxes and Depreciation Hawaiian Electric Company, Inc. (1 year) Director of Taxes and Depreciation Hawaiian Electric Company, Inc. (5 years) Tax Manager, Coopers & Lybrand (5 years) Senior Assistant Accountant, Deloitte Haskins & Sells (2 years)
Education:	Bachelor of Science, Business Administration Graduated Magna Cum Laude University of Southern California Juris Doctor Hastings College of the Law, University of California
Other Qualifications:	Certified Public Accountant, Hawaii and California Member of the State Bar, Hawaii and California
Previous Testimony:	Docket No. 5658--Depreciation Adjustment Income Tax Calculation Docket Nos. 6432, 6531, 6998, 6999, 7000, 7764, 99-0207, and 04-0113 — HECO, HELCO, and MECO Rate Cases Taxes Other than Income Taxes, Income Tax Expense, Unamortized Investment Tax Credits, Accumulated Deferred Income Taxes and Net SFAS 109 Regulatory Assets

HAWAIIAN ELECTRIC COMPANY, INC.
TAXES OTHER THAN INCOME TAXES
CHARGED TO OPERATIONS

TEST YEAR 2007

($ Thousand)

		A At Present Rates	B Adjustment	C At Proposed Rates
	PAYROLL TAXES			
1	F.I.C.A. Taxes	6,325		6,325
2	Federal Unemployment Taxes	61		61
3	State Unemployment Taxes	43		43
4	Total Payroll Taxes	6,429	-	6,429
	REVENUE TAXES			
5	Public Service Company Taxes	79,354	8,907	88,261
6	Public Utility Fees	6,742	757	7,499
7	Franchise Royalty Taxes	33,626	3,763	37,389
8	Total Revenue Taxes	119,722	13,427	133,149
9	TOTAL TAXES OTHER THAN INCOME TAXES	126,151	13,427	139,578

SOURCE: HECO-WP-1501

HAWAIIAN ELECTRIC COMPANY, INC.
TAXES OTHER THAN INCOME TAXES
CHARGED TO OPERATIONS

TEST YEAR 2007

($ Thousand)

		A At Current Effective Rates	B Adjustment	C At Proposed Rates
	PAYROLL TAXES			
1	F.I.C.A. Taxes	6,325		6,325
2	Federal Unemployment Taxes	61		61
3	State Unemployment Taxes	43		43
4	Total Payroll Taxes	6,429	-	6,429
	REVENUE TAXES			
5	Public Service Company Taxes	82,408	5,853	88,261
6	Public Utility Fees	7,002	497	7,499
7	Franchise Royalty Taxes	34,922	2,467	37,389
8	Total Revenue Taxes	124,332	8,817	133,149
9	TOTAL TAXES OTHER THAN INCOME TAXES	130,761	8,817	139,578

SOURCE: HECO-WP-1501

HAWAIIAN ELECTRIC COMPANY, INC.
COMPUTATION OF INCOME TAX EXPENSE

TEST YEAR 2007

($ Thousand)

		A At Present Rates	B Adjustment	C At Proposed Rates	References
1	Total Operating Revenues	1,350,277	151,505	1,501,782	
	Operating Expenses:				
2	Fuel Oil and Purchased Power	929,069		929,069	
3	Other Operation & Maint Exp	196,316	152	196,468	
4	Depreciation & Amortization	79,736		79,736	
5	Amortization of State ITC	(1,321)		(1,321)	HECO-1504
6	Taxes Other Than Income Taxes	126,151	13,427	139,578	HECO-1501
7	Other Interest, Net	375		375	
8	Total Operating Expenses	1,330,326	13,579	1,343,905	
9	Operating Income Before Taxes	19,951	137,926	157,877	
	Tax Adjustments:				
10	Interest Expense	(30,587)		(30,587)	HECO-WP-1502
11	Meals & Entertainment	81		81	HECO-WP-1502
12	Total Tax Adjustments	(30,506)	-	(30,506)	
13	Taxable Income for Rate-Making	(10,555)	137,926	127,371	
14	Composite Effective Income Tax Rate	38.9097744%	38.9097744%	38.9097744%	
15	TOTAL INCOME TAX EXPENSE	(4,107)	53,667	49,560	

HAWAIIAN ELECTRIC COMPANY, INC.
COMPUTATION OF INCOME TAX EXPENSE

TEST YEAR 2007

($ Thousand)

		A At Current Effective Rates	B Adjustment	C At Proposed Rates	References
1	Total Operating Revenues	1,402,226	99,556	1,501,782	
	Operating Expenses:				
2	Fuel Oil and Purchased Power	929,069		929,069	
3	Other Operation & Maint Exp	196,369	100	196,469	
4	Depreciation & Amortization	79,736		79,736	
5	Amortization of State ITC	(1,321)		(1,321)	HECO-1504
6	Taxes Other Than Income Taxes	130,761	8,817	139,578	HECO-1501
7	Other Interest, Net	375		375	
8	Total Operating Expenses	1,334,989	8,917	1,343,906	
9	Operating Income Before Taxes	67,237	90,639	157,876	
	Tax Adjustments:				
10	Interest Expense	(30,587)		(30,587)	HECO-WP-1502
11	Meals & Entertainment	81		81	HECO-WP-1502
12	Total Tax Adjustments	(30,506)	-	(30,506)	
13	Taxable Income for Rate-Making	36,731	90,639	127,370	
14	Composite Effective Income Tax Rate	38.9097744%	38.9097744%	38.9097744%	
15	TOTAL INCOME TAX EXPENSE	14,292	35,267	49,559	

HAWAIIAN ELECTRIC COMPANY, INC.
FEDERAL INVESTMENT TAX CREDIT
FOR THE YEARS 2002 - 2007

($ Thousand)

		A	B	C	D	E	F
		Actual 2002	Actual 2003	Actual 2004	Actual 2005	Estimate 2006	**Test Year 2007**
	1971 REVENUE ACT						
1	Beginning Balance	8,667	7,614	6,602	5,633	4,728	**3,881**
2	Amortizations	(1,053)	(1,012)	(969)	(905)	(847)	**(764)**
3	Additions (Net of Recap)	-	-				
4	Other Adjustments	-	-				
5	Ending Balance	7,614	6,602	5,633	4,728	3,881	**3,117**

HAWAIIAN ELECTRIC COMPANY, INC.
STATE CAPITAL GOODS EXCISE TAX CREDIT
FOR THE YEARS 2002 - 2007

($ Thousand)

		A	B	C	D	E	F
		Actual 2002	Actual 2003	Actual 2004	Actual 2005	Estimate 2006	**Test Year 2007**
STATE ITC							
1	Beginning Balance	21,082	22,097	22,444	24,759	26,481	**28,984**
2	Amortizations	(882)	(936)	(996)	(1,117)	(1,201)	**(1,321)**
3	Additions (Net of Recap)	1,897	1,283	3,311	2,839	3,704	**2,712**
4	Ending Balance	22,097	22,444	24,759	26,481	28,984	**30,375**
5	Average Balance (At Gross)						**29,680**
6	Amortization at Gross of Taxes			996	1,117	1,201	**1,321**
7	Amortization , Net of State Taxes*	539	572				
PV TAX CREDIT							
8	Beginning Balance	-	-	-	-	-	**-**
9	Amortizations	-	-	-	-	-	**-**
10	Additions (Net of Recap)	-	-	-	-	-	**500**
11	Ending Balance	-	-	-	-	-	**500**
12	Average Balance (At Gross)						**250**
TOTAL CREDITS							
13	Ending Balance	22,097	22,444	24,759	26,481	28,984	**30,875**
14	Average Balance (At Gross)						**29,930**

* NOTE: Prior to 2004, the unamortized state capital goods excise tax credit was shown net of state taxes in the general ledger. In 2004, the balance was grossed up and the state tax effect was reclassified to the accumulated state deferred income tax liability account.

HAWAIIAN ELECTRIC COMPANY, INC.
SUMMARY OF DEFERRED INCOME TAX LIABILITY
BALANCES FOR RATE BASE PURPOSES
FEDERAL AND STATE

($ Thousand)

		A Actual Balance 12/31/2003	B Actual 2004 Adds (Amort), Net	C Actual Balance 12/31/2004	D Actual 2005 Adds (Amort), Net	E Actual Balance 12/31/2005
	Accelerated Depreciation over Straight Line					
1	FEDERAL	54,564	5,001	59,565	1,769	61,334
2	STATE	7,910	(881)	7,029	161	7,190
3	Subtotal	62,474	4,120	66,594	1,930	68,524
	All Other Items					
4	FEDERAL	63,806	5,689	69,495	11,948	81,443
5	STATE	12,782	(332)	12,450	2,148	14,598
6	Subtotal	76,588	5,357	81,945	14,096	96,041
7	TOTAL	139,062	9,477	148,539	16,026	164,565

		Actual Balance 12/31/2005	Estimate 2006 Adds (Amort), Net	Estimate Balance 12/31/2006	Estimate 2007 Adds (Amort), Net	Estimate Balance 12/31/2007
	Accelerated Depreciation over Straight Line					
8	FEDERAL	61,334	(2,120)	59,214	(3,527)	55,687
9	STATE	7,190	(409)	6,781	(404)	6,377
10	Subtotal	68,524	(2,529)	65,995	(3,931)	62,064
	All Other Items					
11	FEDERAL	81,443	(3,373)	78,070	(1,909)	76,161
12	STATE	14,598	(492)	14,106	(341)	13,765
13	Subtotal	96,041	(3,865)	92,176	(2,250)	89,926
14	TOTAL	164,565	(6,394)	158,171	(6,181)	151,990
15	AVERAGE BALANCE					155,081

HAWAIIAN ELECTRIC COMPANY, INC.
SFAS 109 RECONCILIATION
REGULATORY ASSETS AND LIABILITIES

($ Thousand)

		A Actual Balance 12/31/2003	B Actual 2004 Amort	C Actual 2004 Adds	D Actual Balance 12/31/2004	E Actual 2005 Amort	F Actual 2005 Adds	G Actual Balance 12/31/2005
1	CWIP Equity Transition (#18673100)	2,030	(90)		1,940	(90)		1,850
2	SFAS 109 Flow Through (#18673200)	3,916	(326)		3,590	(326)		3,264
3	Plant Transition (#18673300)	22,505	(1,023)		21,482	(1,023)		20,459
4	CWIP Equity Ongoing (#18673400)	25,995	(770)	3,328	28,553	(840)	2,567	30,280
5	Federal ITC (#18673500)	(4,210)	622		(3,588)	577		(3,011)
	Excess Deferred Taxes							
6	(#18673110 - Acct 282)	(3,617)	904		(2,713)	904		(1,809)
7	(#18673900 - Acct 283)	(1,530)	58		(1,472)	58		(1,414)
8	Subtotal	(5,147)	962	-	(4,185)	962	-	(3,223)
	Deficit Deferred Taxes							
9	(#18673120 - Acct 282)	2,438	(111)		2,327	(111)		2,216
10	(#18673190 - Acct 283)	(76)	39		(37)	37		-
11	Subtotal	2,362	(72)	-	2,290	(74)	-	2,216
12	TOTAL	47,451	(697)	3,328	50,082	(814)	2,567	51,835
13	AVERAGE BALANCE				48,767			50,959

NOTE: All SFAS 109 assets and liabilities and related taxes have been computed on effective tax rate of 32.8947368% (federal) and 6.0150376% (state).

HAWAIIAN ELECTRIC COMPANY, INC.
SFAS 109 RECONCILIATION
REGULATORY ASSETS AND LIABILITIES

($ Thousand)

		H Actual Balance 12/31/2005	I Actual 2006 Amort	J Actual 2006 Adds	K Actual Balance 12/31/2006	L Estimated 2007 Amort	M Estimated 2007 Adds	N Estimated Balance 12/31/2007
1	CWIP Equity Transition (#18673100)	1,850	(87)		1,763	(75)		1,688
2	SFAS 109 Flow Through (#18673200)	3,264	(326)		2,938	(326)		2,612
3	Plant Transition (#18673300)	20,459	(1,023)		19,436	(1,023)		18,413
4	CWIP Equity Ongoing (#18673400)	30,280	(899)	2,317	31,698	(933)	3,861	34,626
5	Federal ITC (#18673500)	(3,011)	539		(2,472)	487		(1,985)
	Excess Deferred Taxes							
6	(#18673110 - Acct 282)	(1,809)	904		(905)	904		(1)
7	(#18673900 - Acct 283)	(1,414)	58		(1,356)	58		(1,298)
8	Subtotal	(3,223)	962	-	(2,261)	962	-	(1,299)
	Deficit Deferred Taxes							
9	(#18673120 - Acct 282)	2,216	(111)		2,105	(111)		1,994
10	(#18673190 - Acct 283)	-	-		-	-		-
11	Subtotal	2,216	(111)	-	2,105	(111)	-	1,994
12	TOTAL	51,835	(945)	2,317	53,207	(1,019)	3,861	56,049
13	AVERAGE BALANCE				52,521			54,628

NOTE: All SFAS 109 assets and liabilities and related taxes have been computed on effective tax rate of 32.8947368% (federal) and 6.0150376% (state).

HAWAIIAN ELECTRIC COMPANY, INC.
RECONCILICATION OF SFAS 109 REGULATORY ASSETS/LIABILITIES AND DEFERRED TAXES

($ Thousand)

	Description	A Regulatory Asset/Liab Balance 12/31/2005	B Federal Def Tax Balance 12/31/2005	C State Def Tax Balance 12/31/2005	D Other 12/31/2005	E Total Def Tax Balance 12/31/2005
1	CWIP Equity Transition	1,850	(1,566)	(286)	2	(1,850)
2	SFAS 109 Flow Through	3,264	(2,759)	(504)	(1)	(3,264)
3	Plant Transition	20,459	(17,296)	(3,163)		(20,459)
4	CWIP Equity Ongoing	30,280	(25,684)	(4,697)	101 **	(30,280)
5	Federal ITC	(3,011)	2,545	466		3,011
6	Excess Accel Depr	(1,809)	595	109	1,105	1,809
7	Excess Deferred Taxes	(1,414)	465	86	863	1,414
8	Deficit Accel Depr	2,216	(730)	(133)	(1,353)	(2,216)
9	Deficit Deferred Taxes	-	-	-		-
10	TOTAL	51,835	(44,430)	(8,122)	717	(51,835)

	Description	F Regulatory Asset/Liab Balance 12/31/2006	G Federal Def Tax Balance 12/31/2006	H State Def Tax Balance 12/31/2006	I Other 12/31/2006	J Total Def Tax Balance 12/31/2006
1	CWIP Equity Transition	1,763	(1,492)	(273)	2	(1,763)
2	SFAS 109 Flow Through	2,938	(2,483)	(454)	(1)	(2,938)
3	Plant Transition	19,436	(16,432)	(3,005)	1	(19,436)
4	CWIP Equity Ongoing	31,698	(26,804)	(4,902)	8	(31,698)
5	Federal ITC	(2,472)	2,089	383		2,472
6	Excess Accel Depr	(905)	297	54	554	905
7	Excess Deferred Taxes	(1,356)	446	82	828	1,356
8	Deficit Accel Depr	2,105	(694)	(126)	(1,285)	(2,105)
9	Deficit Deferred Taxes	-	-			-
10	TOTAL	53,207	(45,073)	(8,241)	107	(53,207)

** In 2005, the deferred taxes on CWIP Equity Grossup were incorrectly overstated by $94,000. It was subsequently corrected in March 2006.

HAWAIIAN ELECTRIC COMPANY, INC.
RECONCILICATION OF SFAS 109 REGULATORY ASSETS/LIABILITIES AND DEFERRED TAXES

($ Thousand)

	Description	A Regulatory Asset/Liab Balance 12/31/2007	B Federal Def Tax Balance 12/31/2007	C State Def Tax Balance 12/31/2007	D * Other 12/31/2007	E Total Def Tax Balance 12/31/2007
1	CWIP Equity Transition	1,688	(1,429)	(261)	2	(1,688)
2	SFAS 109 Flow Through	2,612	(2,207)	(404)	(1)	(2,612)
3	Plant Transition	18,413	(15,567)	(2,847)	1	(18,413)
4	CWIP Equity Ongoing	34,626	(29,279)	(5,354)	7	(34,626)
5	Federal ITC	(1,985)	1,678	308	(1)	1,985
6	Excess Accel Depr	(1)	-	-	1	1
7	Excess Deferred Taxes	(1,298)	428	79	791	1,298
8	Deficit Accel Depr	1,994	(658)	(120)	(1,216)	(1,994)
9	Deficit Deferred Taxes	-				-
10	TOTAL	56,049	(47,034)	(8,599)	(416)	(56,049)

* Column D amounts represent the net unamortized "base" SFAS 109 adjustments recorded in 1993 related to excess and deferred taxes booked to Reg Ass/Liab. Columns B and C represent the tax "gross up" of these "base" items.
Lines 1 through 5 do not have comparable "base" amounts in Column D because their SFAS 109 adjustments only required a tax "gross up". The "base" on which this gross up was calculated resides in either plant in service or unamortized Federal ITC balance sheet accounts. On the other hand, the "base" for lines 6 through 10 were accounted for in the Reg Asset/Liab. Account.

Column A is from HECO-1506, p. 3
Column B is from HECO-WP-1505a, pp. 5-6
Column C is from HECO-WP-1505b, pp. 5-6

HAWAIIAN ELECTRIC COMPANY, INC.
ESTIMATED INCREASE IN GENERAL EXCISE TAX (GET)
TEST YEAR 2007

($ Thousand)

EE	Expense Element Description		Reference
201	Material Issues/Purchases	12,140	HECO-1508, page 2
205	Material-Purchasing Card	609	HECO-1508, page 2
451	Information System Expense-Production and Development	6,077	HECO-1508, page 3
462	Info Sys Exp-PC Software Purch	1,464	HECO-1508, page 2
501	Outside Services-General	52,804	HECO-1508, page 2
502	Outside Services-Legal	843	HECO-1508, page 2
503	Outside Services-Temp Hire	79	HECO-1508, page 2
505	Outside Services-Construction	2,012	HECO-1508, page 2
506	Outside Services-Engineering	185	HECO-1508, page 2
508	Outside Services-Environmental	695	HECO-1508, page 2
570	Rents	6,179	HECO-1508, page 2
600	General Equipt Plant Maint	244	HECO-1508, page 2
Less	Emission Fees included in Outside Services General	1,090	HECO-620
Less	Line Fees/Bank Fees included in Outside Services General	162	Rate Case Direct Non-Labor Rpt (HECO-WP-101(G), A&G Oper, Account 923020, PKT Treasury/825/PHE/501
	Subtotal (A)	82,079	
	Additions/Deductions for budget adjustment/normalization items:		
	Exclude Incremental DSM	(16,674)	HECO-906 (exp elements 201, 205, 462, 501, 570)
	Distributed Generation	(155)	HECO-619
	Normalize Smart Signal cost	(598)	HECO-620
	Normalize IRP cost	31	HECO-620
	Outside Contractors-Customer Records and Collections	63	HECO-T-8, pg. 10, lines 8-15
	Normalize cost for heat resistant coveralls	(61)	HECO-T-11, pg. 2, paragraph 1
	Exclude cost of 401K Administration	(27)	HECO-1201
	Normalize negotiations consulting cost	(19)	HECO-1201
	HR Suite-consulting expenses	179	HECO-1201
	HR Suite-software maintenance	(55)	HECO-1201
	Rents	(262)	HECO-1301
	Normalize Ward Parking Facility Improvement Project	(362)	HECO-1301
	Change in project scope for covered parking level project	(150)	HECO-1301
	Subtotal (B)	(18,090)	
	Estimated Direct Non-Labor O&M (C) = (A) + (B)	63,989	
	Increase in GET Rate (D)	0.5%	
	Estimated O&M Increase Due to Increase in GET Rate (C) x (D)	320	

**HAWAIIAN ELECTRIC COMPANY, INC.
DIRECT NON-LABOR BY EXPENSE ELEMENT
TEST YEAR 2007**

Expense Element	Description	Amount
201	Matl-Issues/Purchases	12,140,383
205	Matl-Purchasing Card	609,228
221	Automotive-Gas & Oil	1,260
301	Vehicles	1,712,000
451	IS Exp-Prod & Dev	10,594,576
462	IS Exp-PC Sftw Purch	1,463,855
501	Outside Svcs-General	52,804,037
502	Outside Svcs-Legal	842,546
503	Outside Svcs-TempHire	79,400
505	Outside Svcs-Constr	2,011,546
506	Outside Svcs-Engr	185,083
508	Outside Svcs-Environ	694,875
509	Outside Svcs-Spec Use	37,635,916
515	Company Memberships	372,916
516	Employee Memberships	44,719
520	Mainland Travel	282,822
521	Meals & Entertainment	131,996
522	Interisland Travel	102,478
530	Workers Compensation	1,332,201
550	Intercompany Charges	2,385,527
570	Rents	6,178,709
600	Gen Plt Equip Maint	244,132
640	Frgt Post & BulkMail	1,328,361
900	Fin Stmt Items	6,234,841
901	Amort of Def Debits	4,455,605
905	Othr Op & NonReg Rev	(592,486)
	Total Direct Non-Labor O&M	143,276,527

Reconciliation to Rate Case Direct Non-Labor Report (HECO-WP-101(G)):

Total Production (Production Operations & Maintenance)	34,615,122
Total Transmission (Transmission Operation & Maintenance)	2,932,026
Total Distribution (Distribution Operation & Maintenance)	7,397,832
Customer Accounts	6,864,356
Customer Services	20,507,763
Total A & G (A & G Operation & Maintenance)	70,959,428
Total Direct Non-Labor O&M	143,276,527

HAWAII... ELECTRIC COMPANY, INC.
INFORMATION SYSTEM DEPARTMENT NON LABOR COSTS
TEST YEAR 2007

RA #	ACTIVITY	LOCATION	INDICATOR	PROJECT #	EXPENSE ELEMENT	LINE ITEM	EXPENSE CATEGORY		2007 BUDGET ESTIMATE	O&M %	O&M subject to GET
IT Project Costs (Non-capital):											
PED	891	PHE	NC	P0000040	501	EFMS Program	Outside Svcs	(1)	800,000	41%	331,947
PEP	720	PHE	NC	P0000427	501	E-Bus Program	Outside Svcs	(1)	521,000	100%	521,000
PEA	897	PHE	NC	P0000428	201	Collaborative Communications	Materials	(2)	21,500	71%	15,319
IT Nonproject Costs:											
PEI	895	PHE	NC	NPEZZZZZ	201	IT000004 - Data Center - Materials	Materials	(2)	32,000	71%	22,800
PEI	896	PHE	NC	NPEZZZZZ	201	IT000005 - Infrastructure LAN - Materials	Materials	(2)	40,000	71%	28,500
PEI	897	PHE	NC	NPEZZZZZ	201	IT000007 - Desktop Business - Materials	Materials	(2)	24,000	71%	17,100
PEI	898	PHE	NC	NPEZZZZZ	201	IT000008 - Desktop Technical - Materials	Materials	(2)	6,000	71%	4,275
PEA	901	PHE	NC	NPEZZZZZ	201	IT000012 - Department - Materials	Materials	(2)	30,000	71%	21,375
PEI	967	PHE	NC	NPEZZZZZ	201	IT000193 - Copiers/Printers/Fax - Materials	Materials	(2)	167,000	71%	118,988
PEA	901	PHE	NC	NPEZZZZZ	461	IT000012 - Department - IS Consult	Other	(2)	63,200	71%	45,030
PEA	891	PHE	NC	NPEZZZZZ	461	IT000014 - Consultant - CB Profile - IS Consult	Other	(2)	1,686,000	71%	1,201,282
PEA	891	PHE	NC	NPEZZZZZ	461	IT000017 - Consultant - Benefits FBF - IS Consult	Other	(2)	20,000	71%	14,250
PEA	891	PHE	NC	NPEZZZZZ	461	IT000124 - Consultant - exc CB	Other	(2)	20,000	71%	14,250
PED	891	PHE	NC	NPEZZZZZ	462	IT000006 - Development - PC SW	Other	(2)	198,000	71%	141,076
PEI	897	PHE	NC	NPEZZZZZ	462	IT000007 - Desktop Business - PC SW	Other	(2)	8,500	71%	6,056
PEI	895	PHE	NC	NPEZZZZZ	570	IT000004 - Data Center	Other	(2)	51,500	71%	36,694
PEI	896	PHE	NC	NPEZZZZZ	570	IT000005 - Infrastructure LAN	Other	(2)	272,000	71%	193,801
PEI	900	PHE	NC	NPEZZZZZ	570	IT000009 - PABX Trunk Charges	Other	(2)	58,000	71%	41,325
PEI	900	PHE	NC	NPEZZZZZ	570	IT000010 - Long Distance -Rents	Other	(2)	6,000	71%	4,275
PEI	900	PHE	NC	NPEZZZZZ	570	IT000011 - Infrastructure Comm - Rents	Other	(2)	8,000	71%	5,700
PEI	967	PHE	NC	NPEZZZZZ	570	IT000193 - Copiers/Printers/Fax - Rents	Other	(2)	120,000	71%	85,501
PEI	895	PHE	NC	NPEZZZZZ	501	IT000003 - HEI Internet Charges - OS Svc	Outside Svcs	(2)	100,000	71%	71,250
PEI	895	PHE	NC	NPEZZZZZ	501	IT000004 - Data Center - OS Svc	Outside Svcs	(2)	1,544,050	71%	1,100,142
PEI	896	PHE	NC	NPEZZZZZ	501	IT000005 - Infrastructure LAN - OS Svc	Outside Svcs	(2)	596,000	71%	424,653
PED	891	PHE	NC	NPEZZZZZ	501	IT000006 - Development - OS Svc	Outside Svcs	(2)	186,000	71%	132,526
PEI	897	PHE	NC	NPEZZZZZ	501	IT000007 - Remedy Chg Mgt Maintenance	Outside Svcs	(2)	45,000	71%	32,063
PEI	897	PHE	NC	NPEZZZZZ	501	IT000007 - Desktop Business - OS Svc	Outside Svcs	(2)	706,300	71%	503,242
PEI	898	PHE	NC	NPEZZZZZ	501	IT000008 - Desktop Technical - OS Svc	Outside Svcs	(2)	290,000	71%	206,626
PEI	900	PHE	NC	NPEZZZZZ	501	IT000010 - Long Distance - OS Svc	Outside Svcs	(2)	81,900	71%	58,354
PEI	900	PHE	NC	NPEZZZZZ	501	IT000011 - Infrastructure Comm - OS Svc	Outside Svcs	(2)	30,000	71%	21,375
PEA	901	PHE	NC	NPEZZZZZ	501	IT000012 - Consulting for FA - Outsourced	Outside Svcs	(2)	48,000	71%	34,200
PEA	901	PHE	NC	NPEZZZZZ	501	IT000012 - Department - OS Svc	Outside Svcs	(2)	35,000	71%	24,938
PEI	915	PHE	NC	NPEZZZZZ	501	IT000184 - Telecom Equip Main - OS Svc	Outside Svcs	(2)	170,000	71%	121,126
PEA	789	PHE	NC	NPEZZZZZ	501	IT000185 - Training Local External - OS Svc	Outside Svcs	(2)	25,000	71%	17,813
						Software maintenance included in the above workorders		(3)	1,595,028	100%	1,595,028
						Software maintenance included in the above workorders		(3)	(1,595,028)	71%	(1,136,464)
						Total 2007 Budget expenses			8,009,950		
						Total ITS O&M Subject to GET					6,077,416

Notes:
(1) HECO-WP-1051, pg. 5
(2) HECO-WP-1051, pg. 11
(3) Adjustment required because software maintenance included in the above workorders should be cleared 100% to expense account codes instead of 71% to expense and 29% to non-expense account codes.

HECO T-16
DOCKET NO. 2006-0386

TESTIMONY OF
KEN T. MORIKAMI

MANAGER
ENGINEERING DEPARTMENT
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Plant Additions, Underground Cost-Sharing, Property Held for Future Use, Contributions in Aid of Construction, and Customer Advances

INTRODUCTION

Q. Please state your name and business address.

A. My name is Ken Morikami and my business address is 820 Ward Avenue, Honolulu, Hawaii 96820.

Q. By whom are you employed and in what capacity?

A. I am employed by Hawaiian Electric Company, Inc. ("HECO") as the Manager of the Engineering Department. My education and experience are listed on HECO-1600.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the Company's 2006 and test year 2007 estimates of:

1) Plant Additions;
2) Property Held for Future Use;
3) Contributions In Aid of Construction ("CIAC"); and
4) Customer Advances.

These estimates will be used by the rate base, tax, and depreciation witnesses.

I will also provide an update on the Company's revised underground cost-sharing policy.

PLANT ADDITIONS

Q. What are plant additions?

A. Plant additions for a particular year are the total cost of capital projects that are completed and placed in utility service during that year. A plant addition occurs when the costs are transferred from the Construction Work In Progress account to the Utility Plant in Service account. Total capital expenditures incurred for a project are all part of the plant addition amount when the completed facility is placed in service.

Q. How are plant additions used in this rate case?

A. Plant additions are used to determine the Plant in Service balances. In this rate case, the estimated 2006 plant additions are added to the actual 2006 Beginning-of-the-Year ("BOY") Plant in Service balance to determine the estimated end-of-year ("EOY") 2006 plant in service balance. This balance then becomes the estimated 2007 BOY Plant in Service balance. The estimated 2007 plant additions are then added to this balance to determine the Plant in Service balance at the end of the test year 2007.

Q. What is the Company's estimate of plant additions for 2006 and test year 2007?

A. The Company's estimate of plant additions is $151,452,000 and $114,706,000 for 2006 and test year 2007, respectively, as shown on HECO-1601.

<u>Development of Plant Addition Estimates</u>

Q. How were the estimates for plant additions for 2006 and test year 2007 developed?

A. The 2006 and test year 2007 plant addition estimates were calculated by adding:

1) the sum of expenditures incurred during all years, up until the year the project is placed in service, for all projects forecast to be placed in service in 2006 and test year 2007;
2) estimates for straggling costs incurred in 2006 and 2007 for projects forecast to be placed in service prior to 2006 and 2007, respectively; and
3) estimated program expenditures for 2006 and 2007.

Q. When were the plant additions estimates finalized for 2006 and 2007?

A. The plant additions estimates were finalized in June 2006.

Q. Is it reasonable to expect that the timing, scope or cost of an individual project may change over the course of a year?

A. Yes. This sometimes happens in the normal course of business. There may be changes in needs or requirements that would cause changes in plans. As I discuss further in my testimony, plans and circumstances have changed for certain individual projects since the plant additions estimates were finalized.

Q. Based on these revised plans and circumstances, has the Company revised its estimates for 2006 and 2007?

A. No. The Company must lock in its test year estimates as of a particular date in order to develop its revenue requirements for the test year. The various witnesses develop their testimonies and exhibits utilizing the same revenue requirement numbers. Any changes to individual estimates after they are locked in would require revenue requirements to be recalculated and the testimonies and exhibits to be revised. Thus, the Company has not revised any of the plant addition estimates. However, once 2006 recorded amounts become available in 2007, the Company will assess whether and to what extent it should adjust its test year plant addition estimates.

<u>Development of Estimated Program Expenditures</u>

Q. What are program expenditures that are also included in Plant Additions?

A. A program is a collection of a specific category or type of small projects that individually are generally less than $100,000 and is budgeted in its entirety. The costs for programs were estimated by many different program managers using assumptions and data determined by them and deemed appropriate for the respective program. The plant additions for programs for 2006 and test year 2007 are assumed to equal the program expenditures for 2006 and test year 2007, respectively.

<u>Development of Project Estimates</u>

Q. How were the estimates for the projects developed?

A. Each project is assigned to a project manager or project engineer and he or she is responsible for designing and managing the project's scope, schedule, and cost estimates. The schedule considers, among other things, the required need date, the project's priority relative to other projects, lead time to order materials, resource requirements, and approvals required such as permitting, regulatory, etc.

Q. Why are projects sometimes not completed as scheduled?

A. While every effort is made to estimate adequate time for the project's tasks, there will inevitably be changes to the duration of tasks or additional tasks may be added due to unanticipated events.

Q. Do you know of any projects that were included in the 2006 and 2007 test year estimates that, due to unanticipated events, will not be undertaken?

A. Yes. It has recently been decided that the Ward Avenue Photovoltaic Project, that is included in 2007 plant additions for $3,500,000, will not be constructed by the Company but will, instead, be built and owned by a non-utility photovoltaic system developer. However, HECO will still incur capital costs of approximately $400,000 to prepare the Archer Substation building to accommodate the photovoltaic project and install additional performance monitoring and display equipment not normally provided by a photovoltaic system developer. The Company will adjust the test year plant additions at the next available opportunity for a net decrease of approximately $3,100,000, due to the revised plans for this project. More detailed information on this project is available in D. Ching's testimony, T-5.

Q. Were there any adjustments to reflect slippages in the project schedules for 2006 and 2007?

A. No. While some of the projects will inevitably slip in schedule and be placed in service later than anticipated, usually there are other projects that will be completed earlier than projected; or identified after the budget is finalized, remain unbudgeted and placed in service. Based on information for the years 1999 to 2005, the annual percent difference between recorded and forecast total plant additions ranged from -30% to 60%, or on average, a -2% difference for the seven-year period (HECO-1602). While the annual percent difference can vary significantly, the percent difference is relatively insignificant over a longer-term perspective. As such, forecasted total plant additions are comparable to the recorded total plant additions and the 2006 and test year 2007 plant addition estimates are therefore reasonable.

Q. How is the Company's total capital expenditures estimate determined?

A. Once individual projects are identified and their scope, schedules, and cost estimates developed, the following process is generally followed in developing the Company's capital expenditures estimate.

1) Managers and staff from each department meet to review and rank, to the degree possible, their proposed projects to determine which projects should move forward in the budget process.
2) Projects are reviewed by the responsible process areas to determine which projects should be considered for inclusion in the upcoming five-year capital budget.
3) The lists of proposed projects for each process area are compiled and presented to the Capital Budget Committee ("CBC").
4) The CBC reviews the proposed projects from a Company-wide perspective

and determines those projects that will be included in (or excluded from) the upcoming five-year capital budget.

5) The project manager or responsible party receives the approved project list and builds/refines the detailed budget estimate.

During the detailed budgeting process, resource leveling reports are generated at several key points in the process to allow those providing resources an opportunity to view the demands, in terms of labor hours, placed on their resources. If necessary, adjustments are made such that the difference between supply and demand for a resource class for a responsibility area is reasonable. This generally results in a more realistic capital budget.

6) To ensure the completeness of the Company's final capital budget, consideration is given to adding any projects that were deferred or created between the process area review period and when the detailed budgeting is built/refined.

7) The proposed capital budget is reviewed at officer briefings and those projects that will be included in (or excluded from) the final budget for the upcoming five years is determined.

8) Subsequently, the five-year capital budget is presented to the Company's Board of Directors.

The plant addition estimates are an outcome of the process that develops the Company's capital expenditures estimate.

Q. Does the Commission have the opportunity to review any of the specific projects that are expected to be added to plant in service?

A. Yes. The Company is required by Paragraph 2.3.(g)(2) of General Order No. 7 to submit all projects with estimated capital expenditures in excess of $2,500,000[1] excluding customer contributions or 10% of the total plant in service, whichever is less, to the Commission for review at least 60 days prior to commencement of construction or commitment for expenditure, whichever is earlier. A list of projects that have been approved by the Commission and will be placed in service and/or have straggling costs placed in service in 2006 and 2007 is shown on HECO-1603.

Q. Please provide examples of projects previously reviewed by the Commission that will be placed in service and/or have straggling costs placed in service in 2006 and 2007.

A. On August 6, 2004, the Commission approved by Decision & Order No. 21224 HECO's project to build a new Dispatch Center and to install a state-of-the-art Energy Management System (EMS). The Dispatch Center and EMS project provide a more robust and technically advanced EMS that supplies better and more complete information needed to operate HECO's generation and delivery systems. The Dispatch Center furnishes physical safeguards to ensure better protection from natural or terroristic incidents. The video display boards for the EMS and the new Dispatch Center building were placed in service in November 2005 and February 2006, respectively. The Telecommunication Extensions and the Energy Management System (EMS) were placed in service in March 2006. Renovations to relocate the Call Center and install the Dispatcher Training Simulator began in June 2006 with other related renovations to follow. The entire project is currently scheduled to be completed in December 2007.

HECO also received approval to proceed with its Waikiki Rehabilitation

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[1] Prior to July 1, 2004, General Order No. 7 required the submission of all projects with estimated capital expenditures in excess of $500,000.

Program, Project One, by Decision & Order No. 21918 on July 15, 2005. The Waikiki Rehabilitation Program, Project One and planned Projects Two and Three address deteriorated underground cable in targeted areas of Waikiki. Numerous cable failures in the Waikiki Project One area pointed to the need for planned cable replacement. The Waikiki Rehabilitation Program, Project One cable replacement was placed in service on June 14, 2006. Since the completion of the Project One cable replacements, there have been no cable failures in the Project One area. Cable failures continue to occur in the pending Project Two and Three areas.

Q. Did these projects conform to initial estimates for cost and schedule?

A. No. The filed costs and schedules are based on information known and/or available at the time the estimates were developed and finalized. As final engineering design and construction of the various projects proceeds, the costs and schedules are revised and updated. For example, the Dispatch Center building and Energy Management System (EMS) Project are currently estimated to total $25.9 million, which is 13% higher that the Commission's approved estimate of $22.9 million. The variance is due to the increased construction costs in Hawaii and upgrades to the wallboard display technology.

On the other hand, the Waikiki Rehabilitation Project One cable replacement project was completed six months ahead of schedule at a cost of $932,000 which is 43% lower that the Commission's approved estimate of $1,618,603. The primary reason for the lower costs is that smaller quantities of cable were installed as part of the project than were originally planned. From the time that the application was filed in July 2001 until the project was approved by the Commission in 2005, 14 outages occurred that necessitated replacement of cable sections in the Project One area prior to the project launch. These cable section replacements were not included as part of the project and therefore decreased the remaining cable replacements and costs for the Waikiki Rehabilitation Project One.

Q. What Distributed Generation ("DG") projects are included in the plant addition estimates for 2006 and test year 2007?

A. The CEIP Substation DG project was completed and placed in service in November 2006 while the Kalaeloa Pole Yard DG project is in its final testing phase and is anticipated to be placed in service by the end of December. These two projects account for approximately $2,863,000. The test year 2007 plant additions include approximately $2,670,000 of costs for the Kuilima Substation DG project and the Dispatchable Standby Generation project for the Kaiser Medical Moanalua Facility, reflected as "Customer DG" in HECO-WP-1601. The Kuilima Substation DG project has subsequently been replaced with the Ewa Nui Substation 4-5-6 DG project. The Company will adjust the test year 2007 plant additions at the next available opportunity to reflect any difference in costs between the Kuilima Substation and the Ewa Nui Substation 4-5-6 DG projects. (See section on 2007 Test Year DG Projects in Mr. Giovanni's testimony in HECO T-6 for further discussion of these projects.)

UNDERGROUND COST-SHARING POLICY

Q. Please describe the Company's revised underground cost-sharing policy.

A. In March, 2006, as part of a joint letter agreement with the Division of Consumer Advocacy, HECO submitted a revised Policy on Underground Lines and a Cost Contribution for Placing Overhead Distribution Lines Underground Guideline

Summary to the Commission. These two documents are the policy and guideline that HECO will apply to future projects involving the installation of new underground lines or the conversion of existing overhead lines to underground. The guideline provides direction on when HECO will construct new transmission, subtransmission, and distribution lines underground, convert existing overhead lines to underground, and how the costs of installing lines underground for projects subject to the policy will be shared. In Decision & Order No. 22467, filed May 16, 2006, the Commission approved HECO's Policy on Underground Lines subject to an amendment with respect to the annual expenditure cap for such projects. In May 2006, HECO submitted a revised Policy on Underground Lines to the Commission incorporating the Commission's amendment. The revised policy is provided as HECO-1604.

Q. Are there any outstanding issues regarding cost recovery for Underground projects?

A. No, there are no outstanding issues.

Q. What HECO Underground cost-sharing projects under the revised underground policy are included in the estimated 2006 and 2007 plant additions?

A. A list of HECO's Underground cost-sharing projects is shown in exhibit HECO-1605.

PROPERTY HELD FOR FUTURE USE

Q. What is Property Held for Future Use?

A. Property Held for Future Use is property owned and held for future use in utility service under a definite plan for such use within 10 years after acquisition.

Q. What is the average balance of Property Held for Future Use for test year 2007?

A. The estimated average balance of Property Held for Future Use is $3,380,000 for test year 2007, as shown in HECO-1606.

Q. What additions have occurred or are expected to occur in 2006 and are reflected in the Property Held for Future Use test year 2007 account balances?

A. When the test year additions to Property Held for Future Use were estimated, the Company anticipated that two parcels of land in Campbell Industrial Park would be purchased by year-end 2006 for a total of $2,862,508 from HRPT Properties Trust. The first parcel is a 44-feet wide parcel of approximately two acres running between HECO's Barbers Point Tank Farm and H-Power that is needed to accommodate HECO's proposed new Campbell Industrial Park generating unit and auxiliaries. The second is a 1.76 acre property between Hanua Street and HECO's existing AES Substation that will allow for expansion of the AES Substation. (more information related to HECO's Campbell Industrial Park Generation Addition project may be found in Docket No. 05-0145).

Unfortunately, HRPT Properties Trust has recently sought to renegotiate the purchase price for these two properties but the Company still expects that the purchase of the two parcels will be completed in 2007. As a result, the Company will adjust for the timing of the purchase and the purchase costs reflected in the Property Held for Future Use test year balance for the CIP properties based on the latest assumptions at the next available opportunity.

Q. Are there any other changes to the proposed Property Held for Future Use account that is reflected in the test year 2007 average balance?

A. Yes, $82,000 for the 1997 purchase costs for the Waianae substation site is reclassified (subtracted) from the Property Held for Future Use to Non-Utility property in 2006. At the time of purchase in 1997, HECO estimated the need for an additional substation at the site to provide additional capacity in the Waianae area. The project, however, was deferred due to a slowdown in growth in the Waianae area. Latest assessments show the need for a new distribution substation in this area after 2007. Based on these latest assessments, the placement of the property into service will be outside the 10 year period (from acquisition) guideline ordered by the Commission in Decision and Order No. 11699 in Docket No. 6998. Thus, the costs for the Waianae Substation site of $82,000 are not reflected in the December 31, 2007 Property Held for Future Use balance.

Q. What other property does HECO currently hold for future use?

A. HECO currently holds a pipeline at the Barbers Point Deep Draft Harbor to be used in the future as a fuel oil pipeline, i.e., Kalaeloa-Barbers Point Harbor Pipeline ("KBPH Pipeline").

Q. Please provide background information on the KBPH Pipeline.

A. The KBPH pipeline was installed in 1991 in conjunction with the construction of the State's Kalaeloa-Barbers Point deep draft harbor project. It was prudent for HECO to install the pipeline at that time since the State's laying of a 15-inch thick reinforced concrete pier and container storage area made it infeasible to lay the pipeline at a later date. Installing the pipeline during the construction of the State's Kalaeloa-Barbers Point Harbor permitted HECO to have the infrastructure to access fuel at costs lower than if the pipeline was installed after the construction of the State's harbor.

Q. Has the Commission allowed the inclusion of the KBPH Pipeline in property held for future use in prior rate cases?

A. Yes. The Commission allowed inclusion of the KBPH Pipeline in property held for future use in its Decision and Orders for HECO's 1992, 1994, and 1995 rate cases, Docket Nos. 6998, 7700, and 7766, respectively. Also, in its Interim Decision and Order No. 22050 ("Interim D&O"), issued September 27, 2005 in the Company's 2005 test year rate case (Docket No. 04-0113), the Commission allowed the inclusion of the KBPH pipeline as reflected in the Stipulated Settlement Letter, filed September 16, 2005, between the Company, the Consumer Advocate, and the Department of Defense ("DOD"). In the Stipulated Settlement Letter, included as Exhibit II of the Interim D&O, the Consumer Advocate and the DOD agreed to the continued inclusion of the pipeline investment in HECO's rate base with the Company's agreement to present a cost/benefit analysis of this investment as part of its evidence in this rate case.

Q. Has the Company prepared a cost/benefit analysis?

A. Yes, it has. The cost/benefit analysis is submitted as HECO-1607. The calculation of the estimated costs and benefit threshold is reflected in Appendix A of the cost study (page 5 of HECO-1607). Due to the confidential nature of some of the inputs into the benefit threshold calculation, portions of HECO-1607 are redacted. An unredacted exhibit will be submitted as a confidential document after the issuance of a protective order in this proceeding.

In developing its analysis, the Company found that, although the estimation of cost to ratepayers is a relatively straightforward calculation, the quantification of benefits from such an investment is a much more problematic and difficult task.

Q. Based on the results of the analysis, what is the conclusion of the Company?

A. The conclusion of the Company as stated in HECO-1607 is that, for a relatively small investment, the Company, and ultimately ratepayers, maintain some leverage in contract negotiations for fuel oil and also maintain future options for the pipeline as a possible gateway for imported fuel and biofuel directly to

HECO's Barber's Point Tank Farm location.

CONTRIBUTIONS IN AID OF CONSTRUCTION

Q. What is CIAC?

A. CIAC is defined in Rule No. 1 of Company's tariff as "money, property, or services contributed to the Company for construction which is not subject to refund or reimbursement in whole or in part." These types of contributions are non-refundable and generally are required when a customer requests facilities that are acceptable to HECO, but are additions beyond the standard facilities that HECO would normally install. For example, when a customer requests a backup transformer that is in addition to what HECO would normally install, the customer is responsible for the costs for the backup transformer. Besides monetary (cash) CIAC, the Company also receives "in-kind" contributions, which are non-cash contributions such as duct line infrastructure built by a subdivision developer, or similar customer, who later turns over ownership of the facilities to the Company.

Q. What is the Company's estimate of receipts of cash CIAC for 2006 and test year 2007?

A. The estimated receipts of cash CIAC are $12,046,000 and $6,148,000 for 2006 and test year 2007, respectively, as shown on HECO-1608.

Q. How were the cash receipts of CIAC estimated?

A. CIAC for specific projects and programs are forecast differently. For specific projects, engineers determine the specific contributions attributable to the specific projects since contributions for specific projects vary considerably from project to project. The estimates of contributions for programs are based on a trend of previous years' receipts. Since programs consist of numerous projects of low cost (many of which are unknown months in advance), it is impractical to forecast the contributions for these projects individually.

Q. Why are the test year 2007 estimates of cash CIAC lower than the CIAC for 2006?

A. The cash CIAC for the test year 2007 is about $5.9 million lower than for 2006 due primarily to the higher CIAC in 2006 for the following projects: Ford Island Substation ($4.8 million) and Salt Lake Boulevard Widening, Phase 2 ($1.5 million).

Q. What is the estimated transfer from Customer Advances to CIAC for 2006 and test year 2007?

A. The estimated transfer from Customer Advances to CIAC is $23,000 and $283,000 for 2006 and test year 2007, respectively, as shown on HECO-1608. These funds were advanced by customers that are no longer refundable. Transfers from Customer Advances to CIAC are discussed further in the next section on Customer Advances.

Q. What is the Company's estimate of "in-kind" CIAC for 2006 and test year 2007?

A. The estimated in-kind CIAC are $6,317,000 and $4,011,000 for 2006 and test year 2007, respectively, as shown on HECO-1608.

Q. Why are the test year 2007 estimates of "in-kind" CIAC lower than the CIAC for 2006?

A. The "in-kind" CIAC for the test year 2007 is about $2.3 million lower than for 2006 due primarily to the higher CIAC in 2006 for the Salt Lake Boulevard Widening project, Phase 2 ($2.7 million).

CUSTOMER ADVANCES

Q. What are Customer Advances?

A. Customer Advances are funds advanced by the customer for facilities provided by HECO. Customer Advances are required for requests for service that require new lines to be constructed for which the cost to construct exceeds the customer's expected revenue for 60 months. Customer Advances differ from CIAC in that they are subject to refund in whole or in part.

Q. What is the average balance for Customer Advances for test year 2007?

A. The estimated average balance for Customer Advances is $676,000, as shown on HECO-1609.

Q. What are the components of Customer Advances?

A. The components of Customer Advances consist of receipts of Customer Advances, refunds of Customer Advances, and transfers of Customer Advances to CIAC.

Q. What are the estimated receipts of Customer Advances for 2006 and test year 2007, respectively?

A. HECO's estimates of receipts of Customer Advances are $48,000 and $77,000 for 2006 and test year 2007, respectively, as shown on HECO-1609.

Q. What are the estimated refunds of Customer Advances for 2006 and test year 2007?

A. The estimated refunds of Customer Advances are $552,000 and $86,000 for 2006 and test year 2007, respectively, as shown on HECO-1609.

Q. When are Customer Advances refunded?

A. Refunds of Customer Advances are made when permanent customers, other than the customer who provided the advance, are served from the facility for which an advance was made or when permanent residents occupy the homes in a new subdivision. The amount refunded to a customer is limited to the amount of the advance collected and no refund is made after ten years from the date of the advance.

Q. Please explain why Refunds of Customer Advances for 2006 are much higher than for 2007.

A. Customer projects become eligible for a refund, within 10 years from the date of the advance, at the time other customers connect to the lines. The 2006 Refunds of Customer Advances amount of $552,000 includes actual customer refunds based on the eligibility criteria. Due to timing of customer events, 2006 refunds are unusually higher than previous years. The 2007 estimated amount of $86,000 is a forecast value that represents an average of past years' refunds.

Q. How were the receipts and refund amounts estimated?

A. Generally, receipts from Customer Advances for construction and refunds paid out were based on previous years' and year-to-date June 2006 amounts, as shown on HECO-WP-1609, page 2.

Q. What are the estimated transfers of Customer Advances to CIAC for 2006 and test year 2007?

A. The estimated transfers of Customer Advances to CIAC are $23,000 and $283,000 for 2006 and test year 2007, respectively, as shown on HECO-1609.

Q. Why are Customer Advances transferred to CIAC?

A. When the ten-year refund period applicable to an advance has expired, the amount of Customer Advance for a project that has not yet been refunded is transferred to CIAC.

Q. How were the transfers to CIAC estimated?

A. The transfers to CIAC are calculated from records of advances. Advances received in 1995 and 1996 that are not expected to be refunded within ten years (expiring in 2005 and 2006) are forecast to be transferred to CIAC in 2006 and test year 2007, respectively.

SUMMARY

Q. Please summarize your testimony.

A. HECO proposes that its plant additions estimate for 2006 and test year 2007, subject to revisions to be submitted by the Company in the near future, be based on the total cost of all projects forecast to be placed in service in 2006 and 2007, respectively, which results from its current process to develop project estimates.

The Company further proposes that three of its properties, the KBPH Pipeline and the two parcels of land in Campbell Industrial Park, be included in the year end 2007 test year balance of Property Held for Future Use.

HECO's forecast of plant additions are $151,452,000 and $114,706,000 for 2006 and test year 2007, respectively. The average balance of property held for future use is $3,380,000 for the test year. Estimated CIAC cash receipts are $12,046,000 for 2006 and $6,148,000 for 2007. In-kind CIAC are estimated to be $6,317,000 and $4,011,000 for 2006 and 2007, respectively. Transfers from customer advances to CIAC are $23,000 for 2006 and $283,000 for 2007. Customer advance receipts are estimated to be $48,000 and $77,000 in 2006 and 2007, respectively. The estimates for customer advance refunds are $552,000 for 2006 and $86,000 for the test year.

The Company's estimates for Plant Additions, Property Held for Future Use, Contributions in Aid of Construction, and Customer Advances are reasonable for test year ratemaking purposes. The Company's underground cost-sharing policy has been finalized and reviewed by the Division of Consumer Advocacy and the Commission

Q. Does this conclude your testimony?

A. Yes.

HAWAIIAN ELECTRIC COMPANY, INC.

KEN T. MORIKAMI

EDUCATIONAL BACKGROUND AND EXPERIENCE

Business Address:	Hawaiian Electric Company, Inc. 820 Ward Avenue Honolulu, HI 96814
Position:	Manager, Engineering Department
Years of Service:	27
Education:	University of Colorado BS, Electrical Engineering (1977)
Previous Positions:	2004-Present HECO Engineering Department Manager
	1996-2004 HECO Project Management Division Director
	1989-1996 HECO Facilities & Project Management Department Project Manager
	1986-1989 HECO Engineering Research Division Program Engineer
	1982-1986 HECO Corporate Planning Department Corporate Planning Analyst
	1981-1982 HECO Distribution Engineering Department Distribution Planner

	1979-1981 HECO Engineering Department Transmission and Distribution Engineer
	1977-1979 City & County of Honolulu, Building Department Electrical Engineer
Previous Testimony:	PUC Docket No. 03-0417 East Oahu Transmission Project
Professional License:	Professional Engineer – Electrical Branch, 1983
Professional Activities:	Hawaii Society of Professional Engineers - Past State President American Public Works Association – Past State President, current National Delegate Waikiki Improvement Association – Board of Director Member Project Management Institute – Member Engineers & Architects of Hawaii – Member

Hawaiian Electric Company, Inc.

2006 and 2007

PLANT ADDITIONS

($ Thousands)

	2006	2007	Reference
Projects	$101,630	$60,520	HECO-WP-1601
Programs	49,821	54,186	HECO-WP-1601
Total	$151,452	$114,706	

Totals may not add due to rounding.

Hawaiian Electric Company, Inc.

1999 - 2005

PLANT ADDITIONS

($ Thousands)

Year	Recorded	Budget	$ Difference	% Difference
1999	58,898	83,874	-24,976	-30%
2000	75,026	84,612	-9,586	-11%
2001	87,901	55,007	32,894	60%
2002	86,271	77,442	8,829	11%
2003	70,613	89,447	-18,834	-21%
2004	146,577	125,571	21,006	17%
2005	109,530	133,203	-23,673	-18%
1999-2005	634,816	649,156	-14,340	-2%

HAWAIIAN ELECTRIC COMPANY, INC.

PROJECTS APPROVED BY THE PUBLIC UTILITIES COMMISSION
INCLUDED IN 2006 & 2007 PLANT ADDITIONS

($ THOUSANDS)

				ESTIMATED PLANT ADDITIONS				
DOCKET NO.	D&O NO.	ITEM	DESCRIPTION	Prior Years	2006	2007	FUTURE YEARS	PROJECT TOTAL
01-0189	18660	P0000143	Salt Lake Boulevard Widening Ph 2	$ 2,586	$ 3,200	$ -		$ 5,786
04-0051	21124	P0000454	K6 Fan Enclosure	799	48	0		$ 847
01-0135	18680	P0000474	Waialua Sugar Privatization	1,368	193	81		$ 1,642
01-0274	20436	P0000507	Kam Hy Resurf Waiahole-Cr Ln	2,002	26	0		$ 2,028
03-0220	20626	P0000832	Waiau 3 Main Transformer Replace	895	1	0		$ 896
04-0021	20918	P0000886	Wal-Mart Sam's Keeaumoku	1,713	89	0		$ 1,802
04-0104	22294	P0000939	Waiau CT Separation	869	11	0		$ 880
02-0207	19775	P9454000	K4 Boiler Controls Upgrade	2,464	987	87		$ 3,538
02-0413	20089	P9903000	Puuloa Road Widening	1,509	8	293		$ 1,810
01-0228	21918	Y00017	Waikiki Rehab Project 1	307	625	0		$ 932
03-0260	21003	Y00021	New Kuahua Substation	9,337	720	0		$ 10,057
00-0040	18292	Y00023	Ward Air Conditioning Replace	7,676	525	190		$ 8,391
02-0142	19915	Y00027	Mokuone Substation	6,237	457	660		$ 7,354
03-0124	20407	Y00029	Telecommunications System	4,617	36	0		$ 4,653
03-0360	21224	Y00030	New Dispatch Center	18,879	5,646	1,417		$ 25,942
01-0444	19875	Y00032	Waiau Fuel Oil Pipeline	40,571	44	0		$ 40,615
04-0350	21993	Y00039	Mamala Substation	743	250	3,233	3,005	$ 7,231
04-0278	21692	Y00040	Ford Island Substation	19,737	4,787			$ 24,524
05-0056	22001	Y00044	Ko Olina Substation	197	1,839	2,792		$ 4,828
05-0217	22201	Y00045	Ocean Pointe Substation	119	3,158	757		$ 4,034
02-0206	20089	P9539000	Kahe 3 Boiler Controls Upgrade	460	285	2,452	51	$ 3,248

POLICY ON UNDERGROUND LINES
Hawaiian Electric Company, Inc.

May 2006

HECO will construct new 138kV transmission, 46kV subtransmission, and primary and secondary distribution lines underground, and convert existing overhead lines to underground lines in accordance with HECO Tariff Rule No. 13 or the following guidelines, which may require PUC approval of a waiver of Rule No. 13.[1] This policy does not supersede or override PUC-approved HECO tariffs or federal, state or local laws rules or regulations; where this policy conflicts, it shall be subordinate.

NEW TRANSMISSION, SUBTRANSMISSION AND DISTRIBUTION LINES

HECO will propose undergrounding of new transmission, subtransmission, and distribution lines:

- When the requestor for undergrounding the lines pays for the cost differential (including engineering, materials and construction) between overhead and underground lines (Rule 13).

HECO will propose undergrounding of new transmission, subtransmission, and distribution lines, and HECO will pay the cost differential for the undergrounding:

- When justified for engineering and/or operating reasons (Rule 13);[2]
- When the cost for underground lines is comparable[3] to the cost for overhead lines and other factors support undergrounding,[4] provided that the project would not cause HECO to exceed an expenditure cap of $1,000,000 for such project cost-differentials and other conversion projects (*see* below) initiated in the same year;[5]

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[1] Responsibility for costs of overhead portion will be determined in accordance with applicable Tariff rules.

[2] In some circumstances, as a practical matter, an overhead installation is not feasible from an engineering and/or operating standpoint. That determination is made in HECO's discretion on a case-by-case basis, and is dependent upon consideration of the existing project site conditions and other factors, such as safety issues, technical feasibility, applicable design, placement and construction regulations, and whether a feasible alternative overhead line routing is available. The following are some non-exclusive examples of situations in which HECO may determine that undergrounding may be justified due to engineering and/or operating reasons: (1) The poles required for the overhead line may not be able to be placed within the City or State constructed sidewalks consistent with the clearance requirements of the American with Disabilities Act or other applicable regulations; (2) An overhead design may not be practical in certain situations (*e.g.*, crossing a large waterway); (3) An overhead line may not be permitted in certain areas (*e.g.*, near an airport); (4) Certain pre-existing improvements and obstructions (*e.g.*, signs, light poles, bridges, buildings, structures, *etc.*) may prevent or significantly hinder the installation of overhead lines due to the required clearances that need to be maintained from these structures; (5) Access to the required poles for operational needs would be restricted (*e.g.*, within freeway rights-of-way or highly secured areas); or (6) The roadway width may not be large enough to accommodate more than one overhead circuit due to conflicting lines.

[3] The cost will be considered comparable when (a) the total underground to overhead cost ratio for a particular project is 1.5-to-1.0 or less, and (b) the magnitude of the cost differential between underground and overhead lines does not exceed $500,000.

[4] If the cost is comparable (*see* note 3), HECO will then proceed to consider whether additional factors may justify HECO paying the cost differential to underground the line for the project. Thus, a final determination on whether to place the lines underground when costs are comparable would depend on HECO's assessment of factors that may include: (1) Project schedule – An underground installation may have less impact on the project schedule and in meeting service dates. This benefit, if it exists, would need to be weighed against the generally longer construction schedule for underground lines; (2) Land rights – Required land rights may be easier to obtain for underground as opposed to overhead lines; (3) Engineering and operational considerations – These may favor underground installation; or (4) Any other relevant factors, as set forth in HRS §269-27.6(5) and in an Application requesting approval to underground the line.

[5] In any one calendar year, HECO will not incur obligations under this Policy to make capital expenditures in excess of $1,000,000 total, without prior commission approval, for (a) the overhead-underground project cost-differentials for new transmission, sub-transmission and distribution lines, and (b) the work-share costs incurred by HECO for conversion of existing overhead to underground lines as part of eligible community or government- initiated projects,

- When an evaluation of the factors found in HRS §269-27.6(a) *(attached)* supports undergrounding (for 46kV subtransmission lines);
- When an evaluation of the factors found in HRS §269-27.6(a) and (b) *(attached)* supports undergrounding (for 138kV transmission lines); or
- When justified as part of an agreement pursuant to which HECO receives some other form of sufficient consideration[6] from the developer/property owner/community group, *etc.* requesting undergrounding of new lines.

Additionally, HECO will consider, consistent with the intent of this policy, undergrounding new distribution lines (25kV and below) when other existing distribution lines previously have been placed underground within the same street, right-of-way or area as the new distribution line.

CONVERSION OF EXISTING OVERHEAD LINES TO UNDERGROUND LINES

HECO will convert existing overhead lines to underground lines:

- As part of an eligible community or government-initiated project to underground HECO's distribution and service lines (25kV and below). Provided that monies are available,[7] HECO shall contribute at 100% its cost, the planning, design, material procurement and construction of the electrical work (e.g., cable installation, transformers, terminations, etc.). The community and/or government agency shall perform at 100% its cost, the planning, design, material procurement and construction of the civil/structural infrastructure work (e.g., trenching, ductline construction, manholes, etc.) (*see generally*, HECO Cost Contribution Guideline Summary);[8]
- Where federal highway funds are available for the undergrounding of lines as part of a state or county highway project pursuant to HRS §264-33.5 and there is cost-sharing for HECO's portion of the project according to the following formula: 80% - federal, 10% - HECO, and 10% - state or county funds;
- When justified for engineering and/or operating reasons (Rule 13);[9] or
- When justified as part of an agreement pursuant to which HECO receives some other form of sufficient consideration from the developer/property owner/community group, *etc.* requesting an underground conversion.[10]

Harold K. Kageura

Harold K. Kageura
Vice President, Energy Delivery

5/19/06
Date

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provided that changes in project schedules after the commitment is incurred or the projects are initiated may affect the actual timing of such expenditures under (a) and/or (b).

[6] To be "sufficient," the value of the consideration received by HECO must be greater than or equal to the cost differential between overhead and underground lines. In some cases, HECO may be able to estimate the value of avoiding or settling litigation. HECO may also be able to estimate the value of land or other legal rights obtained as consideration. In other cases, the determination may be based on HECO's informed judgment. In any event, the value of consideration to be received will have to be considered on a case-by-case basis.

[7] *See* note 5.

[8] As part of these projects, HECO will consider allowing use of existing ductlines. If HECO allows such use (HECO may need to preserve use for other purposes), the applicant shall also pay contribution in aid of construction (CIAC) in the amount of the cost to originally install the duct.

[9] *See* note 2.

[10] See note 6.

§269-27.6 Construction of high-voltage electric transmission lines; overhead or underground construction. (a) Notwithstanding any law to the contrary, whenever a public utility applies to the public utilities commission for approval to place, construct, erect, or otherwise build a new forty-six kilovolt or greater high-voltage electric transmission system, either above or below the surface of the ground, the public utilities commission shall determine whether the electric transmission system shall be placed, constructed, erected, or built above or below the surface of the ground; provided that in its determination, the public utilities commission shall consider:

(1) Whether a benefit exists that outweighs the costs of placing the electric transmission system underground;
(2) Whether there is a governmental public policy requiring the electric transmission system to be placed, constructed, erected, or built underground, and the governmental agency establishing the policy commits funds for the additional costs of undergrounding;
(3) Whether any governmental agency or other parties are willing to pay for the additional costs of undergrounding;
(4) The recommendation of the division of consumer advocacy of the department of commerce and consumer affairs, which shall be based on an evaluation of the factors set forth under this subsection; and
(5) Any other relevant factors.

(b) In making the determination set forth in subsection (a), for new 138 kilovolt or greater high-voltage transmission systems, the public utilities commission shall evaluate and make specific findings on all of the following factors:

(1) The amortized cost of construction over the respective usable life of an above-ground versus underground system;
(2) The amortized cost of repair over the respective usable life of an above-ground versus underground system;
(3) The risk of damage or destruction over the respective usable life of an above-ground versus an underground system;
(4) The relative safety and liability risks of an above- ground versus underground system;
(5) The electromagnetic field emission exposure from an above-ground versus underground system;
(6) The proximity and visibility of an above-ground system to:
  (A) High density population areas;
  (B) Conservation and other valuable natural resource and public recreation areas;
  (C) Areas of special importance to the tourism industry; and
  (D) Other industries particularly dependent on Hawaii's natural beauty;
(7) The length of the system;
(8) The breadth and depth of public sentiment with respect to an above-ground versus underground system; and
(9) Any other factors that the public utilities commission deems relevant.

Hawaiian Electric Company, Inc.
Underground Cost Sharing Policy Projects
Included in Plant In Service as of Test Year 2007

Docket No.	Project/ Program No.	Project	Estimated Project Cost	Estimated Cost Share (with UG Policy)	Year Plant in service
04-0274	P1700000	1424 Gulick Avenue	12,500	12,500	2006
N/A	P0000530	Ka Iwi Scenic Shoreline, Phase 1, Increment 2	392,810	41,926	2006
04-0130	P1700000	45-540 Mahinui Road	144,463	104,314	2006
N/A	P0037376	2122 Kanealii Ave, Pauoa	20,879	13,405	2006
N/A	P0043903	3711 Diamond Head Rd. Conversion	47,000	47,000	2007
N/A	P1700000	Anti-Crime St Lighting Imp, Waikiki, PIII, Kalakaua Ave	43,466	21,733	2007
			661,118	240,878	

Hawaiian Electric Company, Inc.

2006 and 2007

PROPERTY HELD FOR FUTURE USE

($ Thousands)

Recorded balance - 12/31/05	$599
Move Waianae Substation to non-utility property	-82
Purchase land for Campbell Industrial Park Generating Station	2,863
Estimated balance - 12/31/06	$3,380
No Estimated Changes in 2007	
Estimated balance - 12/31/07	$3,380

Hawaiian Electric Company, Inc.

2006 and 2007

PROPERTY HELD FOR FUTURE USE

($ Thousands)

Name of Site	Size	Tax Map Key	Year Acquired	Proposed Service Date	Purchase Price
Kalaeloa-Barbers Point Harbor Pipeline	----	----	1991	----	$517
Waianae Substation	28,719 sq ft	8-5-019:049	1997	----	$82
Campbell Industrial Park Generating Station	2.045 acres	9-1-26:39	2006 (N.1)	July 2009	$1,176
Campbell Industrial Park Generating Station	1.76 acres	9-1-26:38	2006 (N.1)	Post 2009	$1,687

N.1 Purchase price renegotiations still underway as of December 2006. Purchase of CIP parcels currently anticipated in year 2007. Test Year to be adjusted for new timing of purchases.

KALAELOA – BARBER'S POINT HARBOR PIPELINE
COST/BENEFIT ANALYSIS

Background

In 1991, Hawaiian Electric Company, Inc. ("HECO" or "Company") constructed valve hatches and pipelines at the Barber's Point Harbor ("KBPH Pipeline"). The Company constructed this facility in conjunction with the State of Hawaii's ("State") construction of a 15-inch thick reinforced concrete pier and container storage area, adjacent to the piers at the harbor. The Company installed its facilities at that time since it was likely that the Company would be denied future access to the harbor or would face excess costs to install future pipelines after the State's construction was completed. By installing the pipeline during the State's construction, HECO was then permitted to have the infrastructure to access fuel at a lower cost than if the pipeline was installed after the construction of the State's harbor facilities. This minimized future higher costs which would ultimately be absorbed by ratepayers.

The Hawaii Public Utilities Commission ("PUC" or "Commission") allowed inclusion of the KBPH Pipeline in property held for future use ("PHFFU") in its Decision and Orders for HECO's 1992, 1994, and 1995 rate cases, Docket Nos. 6998, 7700, and 7766, respectively. Also, in Interim Decision and Order No. 22050 in the Company's 2005 test year rate case (Docket No. 04-0113), the Commission allowed the inclusion of the KBPH Pipeline as reflected in the Stipulated Settlement Letter, filed September 16, 2005, between the Company, the Consumer Advocate and the Department of Defense ("DOD"). In the Stipulated Settlement Letter, at Exhibit II, page 9, the Company agreed to prepare and present a cost/benefit analysis of this investment as part of its evidence in the subject rate case. The Consumer Advocate and DOD agreed to the continued inclusion of the pipeline investment in HECO's rate base in the 2005 test year rate case.

In Decision and Order No. 11699, issued June 31, 1992 , the Commission established a 10-year criteria to limit the exposure of ratepayers to pay for PHFFU investments not having a near-term implementation plan. In Docket No. 04-0113, HECO maintained that the KBPH Pipeline is different from the types of assets that are generally included in PHFFU, such as land for future substation sites. As such it is reasonable for HECO to continue to include the costs for the KBPH Pipeline in PHFFU even though HECO does not have a defined plan for the use or commercial operation of the property and even though it has been more than ten years since the facility was installed because:

- it was constructed and installed under unique circumstances,
- it provides the Company with the opportunity to minimize future higher costs, and
- it is a minimal investment to preserve the Company's fuel procurement options.

The KBPH Pipeline continues to be a possible gateway for imported fuel to HECO's Barbers Point Tank Farm ("BPTF") location. The Company's use of the pipeline will depend on factors such as the condition of the pipeline at the time its use is contemplated, and the Company's ability to connect to the pipeline (taking into account the need for easements and the utilization of the right of way by other pipelines at the time). Nevertheless, this option has become more attractive given the BPTF dedicated intra-system fuel transfer infrastructure which interconnects the Kahe and Waiau generating stations and Iwilei Tank Farm into a stand-alone fuel distribution system. This is enhanced with the BPTF being the site for HECO's next generating unit and the Company will then have the ability to increase the number of fuel grades or types which it can receive, store, and consume within the BPTF. In addition, the existence of the KBPH Pipeline has been used in negotiations for fuel contracts with Oahu-based refineries to provide credence to the option of importing fuel oil.

Cost/Benefit Analysis

Costs

The estimate of costs to ratepayers for the continued inclusion of the KBPH Pipeline in PHFFU is fairly straightforward to compute. It is the annual revenue requirement based on the KBPH Pipeline's original cost and the Company's proposed rate of return on rate base, grossed up for taxes. The computation is found on Appendix A. The result of this calculation represents the amount of annual revenues that ratepayers must pay for the Company to continue to hold the KBPH Pipeline in its rate base.

Benefits

The benefits portion of this analysis, however, is much more problematic and difficult to compute in dollar terms because the current benefits of the KBPH Pipeline are its opportunities for different future uses, which have not been specifically determined. Based on a qualitative benefit viewpoint, the existence of the KBPH Pipeline provides HECO with the possibility of an alternative delivery point for the potential importation of petroleum products, which are currently delivered mainly through the Chevron and Tesoro off-shore moorings. The existence of the KBPH Pipeline has been employed as one of the elements in the Company's negotiations strategy for fuel contracts with Chevron and Tesoro. A discussion on Fuel Contract Negotiations Issues, Exhibit D, and LSFO Fuel Delivery Operations and Infrastructure Provisions, Exhibit H, was provided under Protective Order No. 16096, filed November 21, 1997, Docket No. 97-0397. A discussion on No. 6 Fuel Oil and Diesel Fuel Supply Contract Negotiations with Chevron and BHP, Exhibit C, and Inter-Island Fuel Delivery Operations and Infrastructure Provisions, Exhibit G, was provided under Protective Order No. 16095, filed November 21, 1997, Docket No. 97-0396. The fuel contracts were approved by the Commission in Decision and Order Nos. 16143 and 16142, filed December 30, 1997, Docket Nos. 97-0397 and 97-0396, respectively.

The resulting benefits of the successful implementation of HECO's fuel contract negotiations strategy is evidenced by the extensions of the Docket Nos. 97-0397 and 97-0396 fuel contracts in Docket Nos. 04-0128 and 04-0129. In Docket Nos. 04-0128 and 04-0129, HECO was able to negotiate contract amendments for its LSFO and Inter-Island Fuel Contracts that extended the contract terms for an additional 10 years, with no change to the price formulas. These contract amendments were approved by the Commission in Decision and Order Nos. 21522 and 21523, filed December 30, 2004, Docket Nos. 04-0128 and 04-0129, respectively.

HECO acknowledges that to attempt to quantify a dollar benefit resulting from the existence of the KBPH Pipeline and its role as one of the negotiation strategy elements in the successful extension of the above mentioned fuel contracts is difficult since direct cause and effect cannot be readily proven. However, the Company has attempted to quantify benefits by calculating what the potential impact from the successful extension of the fuel contracts has been in saving ratepayers' costs. The calculation of this impact is shown on Appendix A by comparing the real price of the discretionary element adder, which is the premium for blending, pumping, delivering, and customs user fee, in 1998 to the current price of the discretionary element adder in the fuel oil contracts and determining how much this difference "saves" ratepayers in the test year. The percentage of the KBPH Pipeline cost to the ratepayers is then calculated as a percentage of the total savings to determine the minimum impact of the KBPH Pipeline on contract negotiations that would equal the "savings". (HECO acknowledges that it would not be possible to quantify the actual impact of its negotiating strategy on the discretionary element adder, or the extent to which the existence of the pipeline contributed to the success of the negotiating strategy.)

Results

[redacted]

Discussion and Conclusion

As noted above, the quantification of the benefits of continuing to hold the KBPH Pipeline is very difficult. However, the results of the analysis show that for a very minimal investment, the Company may continue to maintain some leverage in contract negotiations with fuel oil suppliers.

The KBPH Pipeline also provides HECO with the potential opportunity to import biofuels from offshore suppliers. HECO's current plans for its proposed 100 MW combustion turbine at Campbell Industrial Park are to use 100% biofuels as the unit's fuel source. See Joint Motion for Approval of Stipulation, filed December 4, 2006, in Docket No. 05-0145, for a discussion of HECO's plans for the utilization of biofuels. However, the future utilization of the KBPH Pipeline would likely entail a further investment in additional pipelines and related equipment for the connection to the Barbers Point Tank Farm. In addition, if the KBPH Pipeline is utilized for biofuels, then it is likely that dedicated tankage for biofuels would also need to be constructed. If these investments exceed $2.5 million, then HECO would file an application requesting Commission approval of the project in accordance with Paragraph 2.3(g)(2) of General Order No. 7. HECO is currently planning to issue a Request for Proposals for biofuels by the end of 2006, and pending the outcome of that process, HECO should have a better assessment of the infrastructure requirements for the utilization of biofuels, and its interrelationship with the KBPH Pipeline. Closer to the time that a decision would be required to place the KBPH Pipeline into service, and any corresponding need for an increase in investment related to the pipeline, whether for the importation of petroleum products or biofuels, HECO plans to conduct an assessment of the structural condition of the pipeline, the potential routes for interconnection to the Barbers Point Tank Farm given the additional harbor infrastructure that has been constructed by the State at the Barbers Point Harbor, and any related need for easements along the potential routes.

Possible future uses of the KBPH Pipeline as noted above may be viewed as additional benefits for ratepayers besides just the existing benefit of leverage in contract negotiations. This, in turn, increases the value of the KBPH Pipeline to the Company and ultimately to its ratepayers.

KALAELOA - BARBER'S POINT HARBOR ("KBPH) PIPELINE COST/BENEFIT ANALYSIS

Estimated Annual Cost to Ratepayers

Cost of Construction	$519,000
Proposed Rate of Return	8.92%
Required Return	$46,295
Divided by Income Divisor	0.55615
2007 Revenue Requirement of KBPH pipeline	$83,242

Estimated 2007 Annual Benefit Threshhold

Hawaiian Electric Company, Inc.

2006 and 2007

CONTRIBUTIONS IN AID OF CONSTRUCTION

($ Thousands)

	2006	2007	Reference
Contributions in aid of construction:			
In-Kind	$ 6,317	$ 4,011	HECO-WP-1608
Cash CIAC:			
Customer Installations	$ 3,776	$ 3,958	HECO-WP-1608
Energy Delivery	8,270	2,190	HECO-WP-1608
Total	$ 12,046	$ 6,148	HECO-WP-1608
Customer Advances:			
Receipts	$ 48	$ 77	
Refunds	(552)	(86)	
Transfers	(23)	(283)	

Hawaiian Electric Company, Inc.

2006 and 2007

CUSTOMER ADVANCES

($ Thousands)

			Reference
Recorded balance - 12/31/05	$	1,495	
2006:			
Receipts		48	HECO-WP-1609
Refunds		(552)	HECO-WP-1609
Transfers to CIAC		(23)	HECO-WP-1609
Estimated balance - 12/31/06	$	968	
2007:			
Receipts		77	HECO-WP-1609
Refunds		(86)	HECO-WP-1609
Transfers to CIAC		(283)	HECO-WP-1609
Estimated balance - 12/31/07	$	676	
Average 2007 balance	$	822	

HECO T-17
DOCKET NO. 2006-0386

TESTIMONY OF
GAYLE T. OHASHI

DIRECTOR, FINANCIAL ANALYSIS
MANAGEMENT ACCOUNTING AND FINANCIAL SERVICES
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Rate Base

INTRODUCTION

Q. Please state your name and business address.

A. My name is Gayle T. Ohashi and my business address is 900 Richards Street, Honolulu, Hawaii 96813.

Q. By whom are you employed and in what capacity?

A. I am the Director of the Financial Analysis Division at Hawaiian Electric Company, Inc. ("HECO" or "Company"). HECO-1700 provides my educational background and work experience.

Q. What is your area of responsibility in this proceeding?

A. My testimony will present HECO's estimated average rate base for the test year and the working cash calculation included in the estimated average rate base.

AVERAGE RATE BASE

Q. What is the Company's estimate of the average rate base for the test year 2007?

A. The test year 2007 average rate base at proposed rates is estimated to be $1,214,313,000 as shown on HECO-1701 and HECO-1701(a).

Q. What is rate base?

A. Rate base is the net investment that is used or useful for public utility purposes that has been funded by investors. Consistent with §269-16(b) of the Hawaii Revised Statutes which requires "...a fair return on the property of the utility actually used or useful for public utility purposes", investors should have the opportunity to earn a fair rate of return on rate base.

Rate Base Calculation

Q. How is the rate base calculated in this docket?

A. For the 2007 test year, the Company calculated an average rate base which is the sum of the average balances of "investments in assets" less the sum of the average balances of "funds from non-investors." I will define these terms later in my testimony.

HECO generally calculates the test year rate base in accordance with the concepts adopted by the Commission in prior rate case decisions, including the stipulation of the Parties ("HECO 2005 Stipulation") and Interim Decision and Order No. 22050 (dated September 27, 2005) in Docket No. 04-0113 ("HECO 2005 Interim Decision"), HECO's test year 2005 rate case; Decision and Order No. 14412 (dated December 11, 1995) in Docket No. 7766 ("HECO 1995 Decision"), HECO's test year 1995 rate case and Decision and Order No. 13704 (dated December 28, 1994) as amended by Order No. 13718 (dated January 5, 1995) in Docket No. 7700, HECO's test year 1994 rate case.

Q. How are the average balances for the rate base items calculated?

A. The average balance of each of the components of rate base is equal to the sum of the estimated 2006 and estimated 2007 year-end balances divided by two. Later in my testimony, I will describe the calculation of the 2006 and 2007 year-end balances for each rate base item or will reference the appropriate HECO witness.

INVESTMENTS IN ASSETS

Q. What are investments in assets?

A. Investments in assets include all investments necessary to provide reliable electric service. Both investors and non-investors pay for these investments.

Q. What items are included in investments in assets?

A. The investments in assets are:

1) net cost of plant in service,
2) property held for future use,
3) fuel inventory,

4) materials and supplies inventories,

5) unamortized net Statement of Financial Accounting Standards ("SFAS") 109 regulatory asset,

6) pension regulatory asset,

7) unamortized SFAS 106 other postretirement benefits other than pensions ("OPEB") regulatory asset,

8) SFAS 158 OPEB regulatory asset,

9) unamortized system development costs,

10) unamortized dispatchable standby generation ("DSG") regulatory asset, and

11) working cash.

Q. Are there rate base components that HECO proposes to include in the test year rate base that were not included in any prior HECO rate cases?

A. Yes. HECO did not previously forecast or include any pension regulatory asset, SFAS 158 OPEB regulatory asset or unamortized DSG regulatory asset. These components will be discussed later in my testimony.

<u>1) Net Cost of Plant in Service</u>

Q. What is the test year estimate of the average net cost of plant in service?

A. The estimated average net cost of plant in service for the test year 2007 is $1,367,090,000, as shown on HECO-1702.

Q. Please describe net cost of plant in service.

A. Net cost of plant in service is comprised of the gross plant in service less accumulated depreciation.

Q. What is gross plant in service?

A. The gross plant in service is the original cost of plant assets. The original cost of plant assets includes the cost of equipment, construction and all other costs necessary for the projects and investments to be used or useful for public utility purposes.

Q. What is accumulated depreciation?

A. Accumulated depreciation is the cumulative amount of depreciation that has been expensed in the past. Depreciation is the allocation of a portion of the original cost of the asset to each period in the estimated useful life of an asset. Part of the accumulated depreciation is reclassified as a cost of removal regulatory liability for financial reporting purposes, and part of the cost of removal regulatory liability is reclassified as asset retirement obligations for financial reporting purposes. The details of depreciation, accumulated depreciation, and the associated financial reporting reclassifications are discussed by Mr. Bruce Tamashiro in HECO T-13.

Q. Why is accumulated depreciation deducted from the original cost of assets?

A. Since the Company recovers depreciation through its revenues, ratepayers have paid the accumulated depreciation amount; therefore investors do not need to earn a return on this.

Q. How is the estimated average net cost of plant in service calculated?

A. The starting point is the recorded net cost of plant in service at December 31, 2005. That amount is derived by subtracting accumulated depreciation and the regulatory liability for removal costs from gross plant in service at December 31, 2005. We make the following adjustments for the 2006 estimates:

1) Add net plant additions (additions including in-kind contributions in aid of construction ("CIAC") presented by Mr. Ken Morikami in HECO T-16)
2) Add costs of removal (presented by Mr. Bruce Tamashiro in HECO T-13),

3) Subtract salvage value (presented by Mr. Bruce Tamashiro in HECO T-13), and

4) Subtract depreciation accrual (presented by Mr. Bruce Tamashiro in HECO T-13).

This net amount is the estimated net cost of plant in service at December 31, 2006. The process is then repeated for the 2007 test year. The average net cost of plant in service is calculated by dividing the sum of the estimated 2006 end of year balance and the 2007 end of year balance by two.

Q. Why is the net cost of plant in service included in rate base?

A. The net cost of plant in service represents the Company's unrecovered investment in plant necessary to provide electric service.

Q. Did the Commission allow the inclusion of net cost of plant in service in rate base in prior HECO rate case decisions?

A. Yes. The Commission included net cost of plant in service in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision.

<u>2) Property Held for Future Use</u>

Q. What is the test year estimate of the average property held for future use?

A. Average property held for future use for test year 2007 is $3,380,000 as shown on HECO-1701.

Q. What is property held for future use?

A. Property held for future use is property owned by HECO and held for future utility purposes. Mr. Ken Morikami explains the details of property held for future use in HECO T-16.

Q. How is the average balance of property held for future use calculated?

A. Mr. Morikami describes the calculation of average balance of property held for future use in HECO T-16.

Q. Why is property held for future use included in rate base?

A. Property held for future use represents the Company's investment in property needed to provide electric service in the future. The smooth operation of the utility sometimes requires the acquisition of property before it is needed.

Q. Did the Commission allow the inclusion of property held for future use in rate base in prior HECO rate cases?

A. Yes. The Commission included property held for future use in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision.

3) Fuel Inventory

Q. What is the test year estimate of the average fuel inventory?

A. The estimated average fuel inventory for test year 2007 is $52,706,000, as shown on HECO-1701.

Q. What is fuel inventory?

A. Fuel inventory is the Company's investment in a supply of fuel held in inventory. Mr. Ross Sakuda explains the details of fuel inventory in HECO T-4.

Q. Why is fuel inventory included in rate base?

A. An investment in fuel inventory is required in order to ensure a sufficient supply of fuel for the Company's power plants so that HECO can provide reliable electric service to its customers.

Q. Did the Commission allow the inclusion of fuel inventory in rate base in prior HECO rate cases?

A. Yes. The Commission included fuel inventory in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision. The Commission has also included fuel inventory in numerous other rate cases for

Hawaii Electric Light Company, Inc. ("HELCO") and Maui Electric Company, Inc. ("MECO").

4) Materials and Supplies Inventories

Q. What is the test year estimate of the average materials and supplies inventories?

A. The estimated average materials and supplies inventories for both production and transmission and distribution for test year 2007 is $12,838,000, as shown on HECO-1703. The test year estimate includes an adjustment for the payment lag associated with the investment in inventory.

Q. What are materials and supplies inventories?

A. Materials and supplies inventories include production inventory and transmission and distribution inventory. Mr. Dan Giovanni in HECO T-6 and Mr. Robert Young in HECO T-7 discuss in detail the inventories of their respective areas.

Q. How is the average balance of materials and supplies inventory calculated?

A. The 2006 and 2007 year-end balances before the adjustment for the payment lag are described by Mr. Giovanni and Mr. Young in HECO T-6 and HECO T-7, respectively. I will describe the adjustment for the payment lag.

Q. Why does the inventory balance include an adjustment for the payment lag?

A. In the HECO 1995 Decision, the Commission determined that materials and supplies inventory should be adjusted to reflect the payment lag associated with goods received but not yet paid for by the Company.

Q. How was the payment lag associated with inventory determined?

A. The payment lag days presented in this rate case were previously presented in the HECO 2005 test year rate case (Docket No. 04-0113). In the 2005 test year rate case, HECO did a study of payments for inventory purchases to determine the length of time between when inventory is received and when payment is made.

HECO tested a sample of 2003 inventory purchases and determined the payment lag for each item. Then, HECO calculated the dollar-weighted average days for the sample. The study is summarized on HECO-WP-1703, page 3.

Q. Why is it appropriate to use the payment lag days that were determined in the 2005 test year rate case?

A. The Company determined that there were no significant changes from the 2005 test year rate case to internal processes and procedures over invoice review and payment. As there were no significant changes noted which would impact the calculation of the payment lag days, the number of payment lag days calculated in the 2005 test year rate case should be reasonably representative of the number of payment lag days in the 2007 test year.

Q. What was the result of the inventory payment lag study?

A. The payment lag days are approximately 19.5 days.

Q. How are the results of the inventory payment lag study used in determining the adjustment to the materials and supplies inventory?

A. The adjustment to the materials and supplies inventory is calculated by multiplying the forecasted daily additions to inventory for the 2007 test year by the inventory payment lag days of 19.5 days. The calculation of the inventory adjustment is shown on HECO-WP-1703, page 1.

Q. What is the test year payment lag adjustment to the materials and supplies inventory?

A. The estimated payment lag adjustment to the materials and supplies inventory for test year 2007 is $787,000, comprised of a $311,000 adjustment to production inventory and a $476,000 adjustment to transmission and distribution inventory as shown on HECO-1703.

Q. How does the payment lag adjustment to inventory affect the payment lag included in the working cash calculation that you discuss later in your testimony?

A. In theory, the O&M non-labor payment lag, assuming that inventory is adjusted for the payment lag, is shorter than if the inventory payment lag had been accounted for in the O&M non-labor payment lag. Since the inventory balance represents only that portion of inventory that has been paid for, the working cash related to O&M non-labor reflects inventory charges to O&M from the "paid-up" inventory balance. O&M charges from inventory therefore have no payment lag in the current lead-lag study in HECO-WP-1706.

Q. Why are materials and supplies inventories included in rate base?

A. An investment in an adequate supply of materials and supplies is necessary to ensure that the Company can effectively operate and maintain its electrical system to provide continuous and reliable service to its customers.

Q. Did the Commission allow the inclusion of materials and supplies inventory in rate base in prior HECO rate cases?

A. Yes. The Commission included materials and supplies inventory in determining rate base in the HECO 1995 Decision and in the HECO 2005 Stipulation and HECO 2005 Interim Decision. The Commission has also included materials and supplies inventory in numerous other rate cases for HELCO and MECO.

5) Unamortized Net SFAS 109 Regulatory Asset

Q. What is the test year estimate of average net SFAS 109 regulatory asset?

A. The estimate for the unamortized net SFAS 109 regulatory asset is $54,628,000, as shown on HECO-1701.

Q. What is the unamortized net SFAS 109 regulatory asset?

A. As described by Mr. Lon Okada in HECO T-15, the net regulatory asset is an accounting asset that came about due to the reporting requirements of SFAS 109.

Q. How was the average unamortized net SFAS 109 regulatory asset calculated?

A. Mr. Okada describes the calculation of average unamortized net SFAS 109 regulatory asset in HECO T-15.

Q. Why is the unamortized net SFAS 109 regulatory asset included in rate base?

A. As explained by Mr. Lon Okada in HECO T-15, SFAS 109 requires the debt portion of the Allowance for Funds used during Construction ("AFUDC"), as well as any other item previously recorded on a net-of-tax basis, to be calculated and capitalized on a gross-of-tax basis. As a result, plant in service would have increased by the tax effect of the debt portion of AFUDC. However, instead of increasing plant in service, SFAS 109 requires this gross-up adjustment to a regulatory asset, with the offsetting credit to the deferred income tax liability account. Because the regulatory asset is offset by the corresponding increase in deferred taxes, there is no net rate base impact.

Q. Did the Commission allow the inclusion of unamortized net SFAS 109 regulatory asset in rate base in prior HECO rate cases?

A. Yes, the Commission included unamortized net SFAS 109 regulatory asset in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Stipulation and the HECO 2005 Interim Decision. The Commission has also included it in all MECO and HELCO rate cases since the inception of SFAS 109.

6) Pension Regulatory Asset

Q. What is the test year estimate of the average pension regulatory asset?

A. The estimated average pension regulatory asset is $161,188,000, as shown on HECO-1701.

Q. What is the pension regulatory asset?

A. The Company forecasts that it will be facing a situation which would require that its existing prepaid pension asset and a minimum pension liability will be charged to accumulated other comprehensive income ("AOCI") in the test year. The Company has applied for approval of regulatory asset treatment of pension amounts which would otherwise be charged to AOCI in Docket No. 05-0310, which is currently pending Commission decision. Ms. Patsy Nanbu discusses the pension regulatory asset in HECO T-10.

Q. How is the average balance of pension regulatory asset calculated?

A. Ms. Nanbu explains the calculation of the average pension regulatory asset in HECO T-10.

Q. Why is the pension regulatory asset included in rate base?

A. The pension regulatory asset is included in rate base because: (1) it is consistent with the ratemaking treatment of the pension expense, (2) it, combined with the minimum pension liability discussed later in my testimony, is the cumulative balance of investor-provided funds in excess of the recognized pension costs and (3) it is an asset that is used or useful for providing electric utility service, as the pension plan is an integral part of the Company's compensation package to its employees and is necessary to attract and retain quality employees that are engaged in the provision of electric service to the public. Ms. Nanbu further discusses the basis for inclusion in rate base in HECO T-10. Ms. Julie Price discusses the benefits of the Company's pension plan in HECO T-12 and Ms. Tayne Sekimura discusses the impact of the pension regulatory asset on HECO's cost of capital in HECO T-19.

<u>7) Unamortized SFAS 106 OPEB Regulatory Asset</u>

Q. What is the test year estimate of the average unamortized SFAS 106 OPEB regulatory asset?

A. The test year estimate of the average unamortized SFAS 106 OPEB regulatory asset is $7,160,000, as shown on HECO-1701.

Q. What is the unamortized SFAS 106 OPEB regulatory asset?

A. As explained by Ms. Julie Price in HECO T-12, the unamortized SFAS 106 OPEB regulatory asset arose from the issuance of SFAS 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions". Prior to SFAS 106, HECO, like most employers, recognized OPEB on a pay-as-you-go basis. SFAS 106, which applied to fiscal years beginning after December 15, 1992, changed expense recognition from pay-as-you-go to an accrual basis. The Commission addressed the issue of accounting for OPEB in Docket Nos. 7243 and 7233 (consolidated). In Interim Decision and Order No. 12286 dated April 6, 1993 and Decision and Order No. 13659 dated November 29, 1994, the Commission allowed HECO to establish this regulatory asset for costs calculated on an accrual basis in excess of the amounts calculated on a pay-as-you-go basis for the period January 1, 1993 to December 31, 1994. The unamortized OPEB regulatory assets represents a receivable from future customers to cover costs associated with services provided in 1993 and 1994, net of amounts that ratepayers have already paid. The regulatory asset is being amortized over an 18-year period.

Q. How is the average balance of the unamortized SFAS 106 OPEB regulatory asset calculated?

A. Ms. Nanbu describes the calculation of the average unamortized SFAS 106 OPEB regulatory asset in HECO T-10.

Q. Why is the unamortized SFAS 106 OPEB regulatory asset included in rate base?

A. By including the unamortized SFAS 106 OPEB regulatory asset as an investment in assets serving customers and the OPEB liability as an offset to investments in assets serving customers, all items impacting rate base are disclosed; however, the net impact on rate base of the SFAS 106 OPEB regulatory asset and the OPEB liability is zero. The OPEB liability is included in funds from non-investors and will be discussed later in my testimony.

Q. Did the Commission address the inclusion of the unamortized SFAS 106 OPEB regulatory asset in rate base in prior HECO rate cases?

A. Yes. In the HECO 2005 Interim Decision, the Commission included the unamortized SFAS 106 OPEB regulatory asset in rate base.

8) SFAS 158 OPEB Regulatory Asset

Q. What is the test year estimate of the average SFAS 158 OPEB regulatory asset?

A. The test year estimate of the average SFAS 158 OPEB regulatory asset is $30,275,000, as shown on HECO-1701.

Q. What is the SFAS 158 OPEB regulatory asset?

A. The Company forecasts that it will be facing a situation which would require that it recognize a minimum OPEB liability with a corresponding charge to accumulated other comprehensive income ("AOCI") under the guidance of SFAS 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans." The Company expects to modify its application in Docket No. 05-03210 to request approval of regulatory asset treatment of OPEB amounts which would otherwise be charged to AOCI. Ms. Patsy Nanbu discusses the SFAS 158 OPEB regulatory asset in HECO T-10.

Q. How is the average balance of the SFAS 158 OPEB regulatory asset calculated?

A. Ms. Nanbu describes the calculation of the average SFAS 158 OPEB regulatory asset in HECO T-10.

Q. Why is the SFAS 158 OPEB regulatory asset included in rate base?

A. The SFAS 158 OPEB regulatory asset is included in rate base because: (1) it is consistent with the ratemaking treatment of the OPEB expense, and (2) it benefits the ratepayers by avoiding the implications of an AOCI charge to HECO's equity, similar to the pension regulatory asset impacts which are discussed in Section 6 above. By including the SFAS 158 OPEB regulatory asset as an investment in assets serving customers and the OPEB liability as an offset to investments in assets serving customers, all items impacting rate base are disclosed; however, the net impact on rate base of the SFAS 158 OPEB regulatory asset and the OPEB liability is zero. The OPEB liability is included in funds from non-investors and will be discussed later in my testimony.

<u>9) Unamortized system development costs</u>

Q. What is the test year estimate of unamortized system development costs?

A. The test year estimate of unamortized system development costs is $3,009,000, as shown on HECO-1701.

Q. What is included in unamortized system development costs?

A. The unamortized system development costs relate to the Human Resources Suite ("HRS") project (Phase 1) as presented by Ms. Julie Price in HECO T-12 and the Outage Management System ("OMS") project as presented by Mr. Robert Young in HECO T-7.

Q. Why is unamortized system development costs included in rate base?

A. In Decision and Order No. 18365, Docket No. 99-0207 (Hawaii Electric Light Co., Inc.'s Test Year 2000 rate case), the Commission ruled that its pre-approval is required before any computer software development project costs may be deferred and amortized for ratemaking purposes. For the HRS project the

Company filed its Application in Docket No. 2006-0003 on January 3, 2006, requesting approval of its proposed accounting treatment to defer costs related to the HRS project. The project is estimated to be completed and in service in November 2007. A Commission decision is still pending in this docket. For the OMS project the Company filed its application on May 28, 2004 in Docket 04-0131. The Commission issued Decision and Order No. 21899 on June 30, 2005. The project is estimated to be completed and in service in March 2007. As presented by Ms. Patsy Nanbu in HECO T-10, the unamortized costs of computer software development projects are similar to the undepreciated costs of capitalized plant and equipment, and should be included in the calculation of rate base. Rate base treatment is appropriate because investors have provided the funds up front to develop the computer software systems which are expected to be in service during the test year. As such, the unamortized system development costs are appropriately included in rate base and allow investors the opportunity to earn a fair return on their investment.

Q. Did the Commission allow the inclusion of unamortized system development cost in rate base in prior HECO rate cases?

A. Yes, the Commission included unamortized system development cost in determining rate base in HECO's 1995 test year rate case. In the 2005 test year rate case, there were no unamortized system development costs, i.e., unamortized system development costs equaled "0", so no deferred system development costs were reflected in the rate base.

10) Unamortized DSG Regulatory Asset

Q. What is the test year estimate of the unamortized DSG regulatory asset?

A. The test year estimate of the unamortized DSG regulatory asset is $323,000, as shown on HECO-1701.

Q. What is the unamortized DSG regulatory asset?

A. The unamortized DSG regulatory asset is to account for the anticipated contribution to be made by HECO to a customer's emergency generator project. It represents the unamortized balance of this contribution. Mr. Dan Giovanni more fully describes the DSG concept and proposed agreement in HECO T-6. The proposed agreement is anticipated to be finalized and executed in 2007. Upon execution the Company will file an application with the Commission and will request regulatory asset treatment of the unamortized contribution amount to be included in rate base.

Q. How was the average unamortized DSG regulatory asset calculated?

A. The average unamortized DSG regulatory asset was calculated by starting with the zero recorded balance at December 31, 2006 and adding the estimated DSG contribution made to the customer, then subtracting the estimated amortization. This net amount is the estimated unamortized DSG regulatory asset balance at December 31, 2007. The average unamortized DSG regulatory asset is calculated by dividing the sum of the estimated 2006 end of year balance of zero and the 2007 end of year balance by two. This calculation is shown on HECO-1704.

Q. Why is the unamortized DSG regulatory asset included in rate base?

A. As explained by Mr. Dan Giovanni in HECO T-6, the unamortized DSG regulatory asset represents an agreed upon contribution to a customer which will enable their emergency generator to operate in parallel with HECO's grid. The contribution provided to the customer is for equipment that will be owned by the customer and installed at their site. The DSG agreement will allow HECO the right, at its discretion, to dispatch the customer's emergency generator for approximately 1,500 hours per year. This will provide HECO an additional source of capacity in times of need which benefits all customers. The contribution is for equipment that will not be owned by HECO and would not be included in utility plant. However, funds for the contribution to the customer will be provided by HECO's investors. As the contribution is being provided to the customer for equipment that will ultimately benefit all ratepayers, the balance of the unamortized DSG regulatory asset is included in rate base to allow investors the opportunity to earn a fair return on their investment.

11) Working Cash

Q. What is the test year estimate of working cash at present and proposed rates?

A. The test year estimate of working cash at present, current effective and proposed rates is $24,122,000, $23,479,000 and $22,284,000, respectively as shown on HECO-1706 and HECO-1706(a).

Q. What is working cash?

A. Working cash is the net cash needed for smooth fiscal operations. Working cash is comprised of sources and uses of cash from operations. Electric service provided before customers pay for services is a use of cash. This will be referred to as the revenue collection lag. Goods and services received before suppliers are paid is a source of cash. This will be referred to as the payment lag.

Q. Why is working cash included in rate base?

A. Working cash is included in rate base because it represents an investment which enables the Company to have sufficient funds to pay suppliers and conduct other business necessary for the provision of electric service to consumers. Inclusion of the working cash investment in rate base recognizes the timing of cash flows through the Company.

Q. What are the elements of working cash?

A. Working cash is comprised of the net of the revenue collection lag and the payment lags. I will discuss these elements in detail in the following sections.

Q. Is the calculation of working cash consistent with the methodology used in prior HECO rate cases?

A. Yes. The methodology that I have used to calculate working cash in this rate case is consistent with the methodology used prior rate cases including HECO's 1995 and 2005 test year rate cases. However, I have included certain refinements and modifications which I will discuss in detail in the following sections.

<u>Revenue Collection Lag</u>

Q. What is the test year estimate of the revenue collection lag days?

A. As discussed by Mr. Darren Yamamoto at HECO T-8, the estimated revenue collection lag days for test year 2007 is 37 days.

Q. What is a revenue collection lag?

A. The revenue collection lag is the time between the provision of electric service and the receipt of cash for that service. This lag represents the average period of time the Company extends credit to its customers for electric service delivered.

Q. What is the working cash impact associated with the revenue collection lag?

A. The working cash impact associated with the revenue collection lag is the cash needed because services are provided to customers before customers pay for the services.

Q. How is the working cash requirement associated with the revenue collection lag calculated?

A. The revenue collection lag is net against the payment lag, then the net payment lag days are applied to each of the payment categories discussed later in my testimony.

Q. Why are depreciation and amortization, interest on customer deposits, and operating income excluded from revenues in the revenue collection lag calculation?

A. All revenues should be included in the calculation of working cash needs associated with the revenue collection lag. However, the Company recognizes that the Commission has disallowed these items in the determination of working cash needs in previous decisions. Therefore, the Company has excluded these items to simplify the issues and to speed the regulatory process in this case. The Company reserves the right, however, to bring these issues before the Commission in the future.

Payment Lag

Q. What is a payment lag?

A. A payment lag occurs when the Company incurs an obligation to pay for an item or service before the Company actually pays for it. Payment lags can be associated with purchases of goods or services or for payments of costs of doing business, such as taxes.

Q. What is the working cash impact associated with the payment lag?

A. The working cash impact associated with the payment lag depends on when the Company is required to pay for expenditures. Generally, payments are made after the goods or services have been received, therefore payment lags are a source of working cash.

Q. What is included in the payment lag?

A. The payment lag includes six categories:

1) Fuel purchases,

2) Operations and maintenance ("O&M") labor,

3) Purchased power,

4) O&M non-labor,

5) Revenue taxes, and

6) Income taxes.

Q. Why has the Company limited the payment lag to these six items in this docket?

A. In general, all payments should be included in the calculation of working cash sources from payment lags. However, the Company has excluded those items that were excluded by the Commission in previous decisions in the determination of working cash. Limiting the working cash needs to these six categories of payments is consistent with the HECO 1995 Decision. It is also consistent with the HECO 2005 Interim Decision. If all revenues were included in the calculation of the revenue collection lag, it would be appropriate to include all payments in the payment lag calculation.

Q. How are the working cash sources calculated for the six categories of payments?

A. The working cash sources for the six categories of payments are calculated as follows:

1. Determine the payment lag days for each category.
2. Subtract the payment lag days from the revenue collection lag days to calculate the net collection lag days.
3. Estimate the total annual expenditures for the test year for each category based on the test year expense estimates.
4. Determine the average daily expenditures by dividing the total annual expenditures for each payment category by 365 days.
5. Multiply each payment's respective average daily expenditure by its

net payment lag days.

I will describe the working cash calculation for each payment category in the next section.

Q. Why did the working cash requirements increase compared to the working cash requirements in HECO's 2005 test year rate case?

A. Projected fuel oil purchases for 2007 are higher than what was projected for 2005, which increased the working cash required in 2007. Also, in HECO's 2005 test year rate case, income tax payments provided significant working cash; however, due to a change in tax regulations, income tax payment lag days decreased and income tax payments are not expected to provide significant working cash in 2007.

1) Working cash for fuel purchases

Q. What is the test year estimate of working cash required for fuel purchases?

A. The test year estimate of working cash required for fuel purchases is $29,416,000, as shown on HECO-1706 and HECO-1706(a), columns F and H.

Q. What is the test year estimate of fuel purchases?

A. The estimated annual amount of fuel purchases is $536,833,000, as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the fuel purchases lag days?

A. The test year estimate of the fuel payment lag days is 17, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for fuel payments calculated?

A. The payment lag days for fuel payments were calculated by determining the vendors who will supply fuel, determining the proportions of fuel expense attributable to each vendor, determining the payment lag days for each vendor, and calculating the weighted average payment lag days.

Q. How were the vendors who will supply fuel determined?

A. The vendors who are expected to supply fuel in the test year were determined based on the contracts for fuel and fuel-related services and discussion with HECO's Fuels Resources Division.

Q. How were the proportions of fuel expense relating to each vendor determined?

A. The proportions were determined based on a breakdown by vendor of spot fuel price for each type of fuel and the forecasts of fuel consumption by fuel type. HECO's Fuels Resources Division provided a breakdown by vendor of spot fuel prices for each type of fuel consumed. HECO's Generation Planning Division provided forecasts of fuel consumption by fuel type.

Q. How were the payment lag days for each vendor determined?

A. The payment lag days for Chevron and Tesoro were determined based on a study of 2005 payments made. These vendors are paid by wire, therefore they have no check clearing lag.

Q. How was the weighted average payment lag days calculated?

A. The weighted average payment lag days was the sum of the proportion for each vendor multiplied by the payment lag. The calculation of fuel payment lag days is shown on HECO-WP-1706, page1.

Q. Is the calculation of the working cash for fuel purchases for the 2007 test year consistent with the method of calculation used in prior HECO rate cases?

A. The methodology is consistent with the methodology used in HECO's 1995 test year rate case including the determination of the payment lag days for the vendors. In the 2005 test year, a modified method was used to determine the payment lag days for Tesoro and Chevron because the amendments extending the contracts were not available at the time the study for the application was done. New contracts were executed and implemented in 2005. The payment lag days were subsequently updated and presented in rebuttal testimony to include available payments as well as a forecast schedule of deliveries and payments for the rest of the test year. Since the same contracts are in effect in 2007, the Company has based its test year estimate on 2005 actual payment lag days.

2) Working cash for O&M labor

Q. What is the test year estimate of working cash required for O&M labor?

A. The test year estimate of working cash required for O&M labor is $6,370,000 as shown on HECO-1706 and HECO-1706(a), columns F and H.

Q. What is the test year estimate of O&M labor?

A. The estimated annual amount of O&M labor is $89,425,000 as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the O&M labor payment lag days?

A. The test year estimate of the O&M labor payment lag days is 11 days, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for O&M labor calculated?

A. The payment lag days for O&M labor were calculated by determining the proportions of significant types of disbursements for labor, determining the payment lag days for each type of disbursement, and calculating the weighted average payment lag days.

Q. What are the significant types of labor disbursements?

A. The significant types of labor disbursements are payments to employees by check or direct deposit (including deposits to employees' credit union accounts), to the federal government for federal income tax withholding and for Federal Insurance

Contribution Act and Medicare taxes ("FICA"), to the state government for state income tax withholding, and to the employee's Hawaiian Electric Industries Retirement Savings Plan ("HEIRS") account.

Q. How were the proportions of significant labor disbursements determined?

A. The proportions for significant labor disbursements were based on 2005 payroll data.

Q. How were the payment lag days for each type of disbursement determined?

A. The payment lag days presented in this rate case are based on the actual 2005 pay schedule and payments.

Q. How were the weighted average payment lag days for O&M labor calculated?

A. HECO determined the weighted average payment lag days for O&M labor by calculating the sum of proportions of labor disbursements multiplied by the respective payment lag days (including check clearing lag days). The calculation of O&M labor payment lag days is shown on HECO-WP-1706, page 8.

Q. Is the calculation of working cash for O&M labor consistent with the method of calculation used in prior HECO rate cases?

A. Yes.

3) Working cash provided by purchased power

Q. What is the test year estimate of working cash provided by purchased power?

A. The test year estimate of working cash provided by purchased power is $2,116,000 as shown on HECO-1706 and HECO-1706(a), columns F and H.

Q. What is the test year estimate of purchase power?

A. The estimated annual amount of purchase power is $386,108,000 as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the purchased power payment lag days?

A. The test year estimate of the purchased power payment lag days is 39 days, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for purchased power calculated?

A. The payment lag days for purchased power is calculated by obtaining the test year estimates of independent power producer ("IPP") payments, determining the respective payment lag days for each type of payment, and calculating the weighted average payment lag days.

Q. Who provided the test year estimates of IPP payments?

A. HECO's Generation Planning Division provided the estimates of IPP payments.

Q. How were the payment lag days for capacity and energy determined?

A. The payment lag days presented in this rate case were previously presented in the HECO 2005 test year rate case (Docket No. 04-0113). In the 2005 test year rate case the payment lag days for purchased power were based on the terms of HECO's purchase power agreements with the respective IPP.

Q. Why is it appropriate to use the payment lag days that were determined in the 2005 test year rate case?

A. The Company determined that there were no significant changes from the 2005 test year rate case to the IPPs contracted with and to the internal processes and procedures over the payments to IPPs. There were also no significant changes to the payment terms in the purchase power agreements with the respective IPPs. As there were no significant changes noted which would impact the calculation of the payment lag days, the Company feels the number of payment lag days calculated in the 2005 test year rate case is reasonably representative of the payment lag days in the 2007 test year.

Q. How were the weighted average payment lag days calculated?

A. The weighted average payment lag days were the sum of the proportion of test year payments for each type of payment to the IPPs multiplied by the payment lag days (including check clearing lag days). The calculation of purchased power payment lag days is shown on HECO-WP-1706, page 37.

Q. Is the calculation of the purchased power payment lag days consistent with the method of calculation used in prior HECO rate cases?

A. Yes. The methodology used in this test year is consistent with the methodology used in HECO's 2005 and 1995 test year rate cases. However, the Company made a refinement to the payment lag day study in the 2005 test year rate case (from the study performed for the 1995 test year rate case) to reflect a separate payment lag for the AES bonus since HECO receives a separate invoice for the AES availability bonus after each contract year. This refinement is reflected in the 2007 test year rate case.

<u>4) Working cash for O&M non-labor</u>

Q. What is the test year estimate of working cash required for O&M non-labor?

A. The test year estimate of working cash required for O&M non-labor is $3,235,000 as shown on HECO-1706 and HECO-1706(a), columns F and H.

Q. What is the test year estimate of O&M non-labor?

A. The estimated annual amount of O&M non-labor is $118,090,000 as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the O&M non-labor payment lag days?

A. The test year estimate of the O&M non-labor payment lag days is 27 days, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for O&M non-labor calculated?

A. The payment lag days for O&M non-labor were calculated by obtaining the test year estimates of O&M non-labor expenses. Large O&M non-labor payments were separately identified and the payment lag for those items was determined. A sample of all other O&M non-labor expenses was examined to determine the payment lag for the sample.

Q. What large O&M non-labor payments were separately identified?

A. Pension expense, OPEB, emission fees, and Electric Power Research Institute ("EPRI") dues were separately identified.

Q. What is the payment lag for pension expense?

A. The payment lag for pension expense is zero as shown on HECO-WP-1706, page 32. Since the pension expense is recognized at the same time the pension liability is credited and the pension liability is included in rate base, the net activity is reflected in the pension liability rather than as an item impacting working cash. In theory, since the pension liability is included in the calculation of rate base, ratepayers are credited the working cash impact of the pension cost at the same time the rate base (i.e., the pension liability) is decreased for the pension cost. There is no lag between the credit to the pension liability (reducing rate base) and the pension cost recognition. Individual payments to the pension fund do not directly correlate to specific pension cost recognition. The timing differences between the pension cost recognition and pension funding are in theory being recognized in the pension liability.

Q. What is the payment lag for OPEB expense?

A. Similar to pension expense, the payment lag for OPEB is zero as shown on HECO-WP-1706, page 32. Since the OPEB cost is recognized at the same time the OPEB liability is credited, the net activity is reflected in the OPEB liability which is included in rate base rather than as an item impacting working cash.

Q. What is the payment lag for emission fees?

A. The payment lag for emission fees is 306 days as shown on HECO-WP-1706, page 32.

Q. How was the payment lag for emission fees determined?

A. The payment lag for emission fees was based on historical emission fee payments from 2005. Details of the study are provided in HECO-WP-1706, page 33.

Q. What is the payment lag for EPRI dues?

A. The payment lag for EPRI dues is -7 days as shown on HECO-WP-1706 page 32.

Q. How was the payment lag for EPRI dues determined?

A. The payment lag for EPRI dues was based on historical EPRI payments from 2005. Details of the study are provided on HECO-WP-1706, page 34.

Q. Is it reasonable to use payment lag days for EPRI dues based on the 2005 EPRI membership agreement for this test year?

A. Yes. HECO is currently negotiating a new multi-year membership agreement with EPRI. Although the terms of this new agreement are not finalized, it is expected the payment terms will be consistent with the payment terms in the agreement with EPRI in 2005. Therefore, the use of payment lag days based on 2005 payments appears to be appropriate. Further discussion of HECO's EPRI membership is presented by Mr. Tamashiro in HECO T-13.

Q. How was the payment lag for other O&M non-labor determined?

A. The payment lag days for other O&M non-labor expenses presented in this rate case were previously presented in the HECO 2005 test year rate case (Docket No. 04-0113). In the 2005 test year rate case the payment lag days were based on a study of a randomly selected sample of 2003 O&M non-labor transactions.

Q. Why is it appropriate to use the payment lag days that were determined in the 2005 test year rate case?

A. The Company determined that there were no significant changes from the 2005 test year rate case to internal processes and procedures over invoice review and payment. As there were no significant changes noted which would impact the calculation of the payment lag days, the number of payment lag days calculated in the 2005 test year rate case is reasonably representative of the number of payment lag days in the 2007 test year.

Q. How was the payment lag for other O&M non-labor determined?

A. First, the payment lag for each item in the sample was determined. Then we calculated the dollar weighted average days for the sample. Payment lag days for all other O&M non-labor were based on this study. Details of the study are provided on HECO-WP-1706, pages 35 and 36.

Q. How was the weighted average payment lag days for O&M non-labor calculated?

A. The weighted average payment lag days is the sum of the proportions of the separately-identified large 2007 test year O&M non-labor payments and the sample of all other 2007 test year O&M non-labor payments multiplied by the respective payment lag days (including check clearing lag days). Details of the study and calculation of O&M non-labor payment lag days is shown on HECO-WP-1706, pages 35 and 36.

Q. Is the calculation of the O&M non-labor payment lag days consistent with the method of calculation used in prior HECO rate cases?

A. Yes. The methodology used for the 2007 test year is consistent with the methodology used in HECO's 2005 and 1995 test year rate cases. However, the Company made some refinements to the payment lag day study in the 2005 test year rate case, which are also reflected in the 2007 test year rate case.

<u>5) Working cash provided by revenue taxes</u>

Q. What is the test year estimate of working cash provided by revenue taxes?

A. The test year estimate of working cash provided by revenue taxes is $12,792,000 at present rates, $13,285,000 at current effective rates and $14,227,000 at proposed rates as shown on HECO-1706 and HECO-1706(a), columns F and H, respectively.

Q. What is the test year estimate of revenue taxes?

A. The estimated annual amount of revenue taxes is $119,722,000 at present rates, $124,332,000 at current effective rates and $133,149,000 at proposed rates as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the revenue tax payment lag days?

A. The test year estimate of the revenue tax payment lag days is 76 days, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for revenue tax payments calculated?

A. We calculated the payment lag days for revenue tax payments by first determining the proportions of various revenue tax payments, then determining the payment lags for the various revenue tax payments, and finally calculating the weighted average payment lag days.

Q. What were the various revenue tax payments?

A. Revenue tax payments included: public service company tax, franchise tax, and public utility commission fees.

Q. How were the proportions of revenue tax payment determined?

A. The proportions of revenue tax payments were determined based on the respective tax rates.

Q. How was the payment lag for each respective type of revenue tax payment determined?

A. The payment lags for the Public Service Company Tax, Franchise Royalty Tax and the Public Utility Commission were based on actual 2005 payments. The check clearing lag days for each type of revenue tax payment were also based on a study of the 2005 revenue tax payments.

Q. How was the weighted average payment lag days calculated?

A. The weighted average payment lag days are the sum of the proportions of revenue taxes multiplied by the respective payment lag days (including check clearing lag days). The calculation of revenue tax payment lag days is shown on HECO-WP-1706, page 43.

Q. Was the calculation of the revenue tax payment lag days consistent with the method of calculation used in prior HECO rate cases?

A. Yes. The methodology used for the 2007 test year is consistent with the methodology used in HECO's 2005 and 1995 test year rate cases. However, the Company made a refinement to the payment lag day study in the 2007 test year rate case from the 2005 test year rate case. In the 2005 test year rate case, the revenue tax payment lag days were based on forecasted test year payments with due dates based on the regulations or rules governing the projected payments. The check clearing lags were based on actual revenue tax payments. In the current study, the payment lag days and check clearing lag days were calculated based on actual 2005 revenue tax payments.

6) Working cash provided by income taxes

Q. What is the test year estimate of working cash provided by income taxes?

A. The test year estimate of working cash provided by income taxes is $(9,000) at present rates, $142,000 at current effective rates and $432,000 at proposed rates as shown on HECO-1706 and HECO-1706(a), columns F and H, respectively.

Q. What is the test year estimate of income taxes?

A. The estimated annual amount of income taxes is $(1,138,000) at present rates, $17,261,000 at current effective rates and $52,528,000 at proposed rates as shown on HECO-1706 and HECO-1706(a), column D.

Q. What is the test year estimate of the income tax payment lag days?

A. The test year estimate of the income tax payment lag days is 40 days, as shown on HECO-1706 and HECO-1706(a), column B.

Q. How were the payment lag days for income taxes calculated?

A. The payment lag days for income taxes were calculated by determining the proportions of federal and state income tax payments, determining the payment lag days for federal and state income tax payments, and calculating the weighted average payment lag days.

Q. How were the proportions of federal and state income tax payments determined?

A. The proportions of federal and state income tax payments were determined by the respective effective tax rates. Effective tax rates take into consideration the deductibility of state income taxes.

Q. How was the payment lag for each respective type of income tax payment determined?

A. The payment lag for each type of income tax payment was determined based on its respective tax regulation and projected payments for 2007. There were no check clearing lag days because payments are made by electronic funds transfer.

Q. Why did the payment lag for income taxes increase so much compared to the payment lag days in HECO's 2005 test year case?

A. Mr. Okada describes the change in tax regulations that resulted in the increase in payment lag days for income taxes in T-15.

Q. How was the weighted average payment lag days calculated?

A. The weighted average payment lag days were the sum of the proportions of federal and state income taxes multiplied by their respective payment lag. The calculation of the payment lag days for income taxes is shown on HECO-WP-1706, page 46.

Q. Is the calculation of the income tax payment lag days consistent with the method of calculation used in prior HECO rate cases?

A. Yes. The methodology is consistent with the methodology used in HECO's 2005 and 1995 test year rate cases; however, as I mentioned previously, a change in tax regulation resulted in a change in payment lag days for income taxes.

FUNDS FROM NON-INVESTORS

Q. What are funds from non-investors?

A. Funds from non-investors are funds that are invested in assets to provide reliable electric service that are from sources other than investors.

Q. What are the categories of funds from non-investors?

A. The categories of funds from non-investors are:

1) unamortized contributions in aid of construction,
2) customer advances for construction,
3) customer deposits,
4) accumulated deferred income taxes,
5) unamortized investment tax credits,
6) unamortized gain on sales,
7) pension liability, and

8) OPEB liability.

Q. Why are funds provided by non-investors deducted from the investment in assets in determining rate base?

A. Investors and non-investors provide the funds that are invested in the assets needed to provide reliable electric service. Funds provided by non-investors are deducted from investments in assets to determine the amount of investor-provided funds. The investor-funded portion of investments in assets servicing customers (i.e., rate base) is the amount on which investors are entitled to receive a fair return. Therefore, rate base represents only the portion of investment in assets that is funded by investors.

1) Unamortized Contributions in Aid of Construction

Q. What is the test year estimate of average unamortized CIAC?

A. The estimated average unamortized CIAC for test year 2007 is $167,549,000, as shown on HECO-1705.

Q. What is unamortized CIAC?

A. CIAC is money or property that a developer or customer contributes to the Company to fund a utility capital project. As specified in the Company's tariff, the contribution is nonrefundable. Amortization of CIAC offsets depreciation expense. Mr. Ken Morikami discusses CIAC in HECO T-16. Amortization of CIAC is discussed by Mr. Bruce Tamashiro in HECO T-13.

Q. How was the estimated average unamortized CIAC calculated?

A. The average unamortized CIAC was estimated by adding its beginning of the year balance to the estimated CIAC additions for the test year, then subtracting the amortization of CIAC to get the estimated end of the year balance. The beginning of the year balance and the end of the year balance were summed and divided by two to estimate the average balance for the test year.

Q. Did the Commission approve the deduction of CIAC from rate base in prior HECO rate cases?

A. Yes. The Commission included CIAC as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Stipulation and the HECO 2005 Interim Decision.

2) Customer Advances for Construction

Q. What is the test year estimate of customer advances?

A. The estimated average customer advances balance for construction for test year 2007 is $822,000, as shown on HECO-1701.

Q. What are customer advances for construction?

A. Customer advances for construction are funds paid by customers to the Company which may be refunded in whole or in part as specified in the Company's tariff. Mr. Ken Morikami discusses customer advances for construction in detail in HECO T-16.

Q. How is the average customer advances calculated?

A. The average customer advances was calculated by taking the recorded customer advances balance at December 31, 2005 and adjusting for estimated changes in 2006 to determine the estimated balance at December 31, 2006. The process is then repeated for the 2007 test year. The sum of the balance at December 31, 2006 and 2007 divided by two is the estimated average balance for customer advances. This calculation is shown on HECO-1609.

Q. Did the Commission approve the deduction of customer advances from rate base in prior HECO rate cases?

A. Yes. The Commission included customer advances as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision and in the HECO 2005 Interim Decision.

3) Customer Deposits

Q. What is the test year estimate for customer deposits?

A. The estimated average customer deposits balance for test year 2007 is $6,377,000, as shown on HECO-1701.

Q. What are customer deposits?

A. Customer deposits are monies collected from customers who do not meet HECO's criteria for establishing credit at the time they request service. Mr. Darren Yamamoto discusses customer deposits in detail in HECO T-8.

Q. How is the average customer deposits calculated?

A. Mr. Yamamoto explains the calculation of average customer deposits in HECO T-8.

Q. Did the Commission approve the deduction of customer deposits from funds from investors to determine rate base in prior HECO rate cases?

A. Yes. The Commission included customer deposits as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision.

4) Accumulated Deferred Income Taxes

Q. What is the test year estimate of accumulated deferred income taxes?

A. The estimated average accumulated deferred income taxes balance for test year 2007 is $155,081,000, as shown on HECO-1701.

Q. What are accumulated deferred income taxes?

A. Accumulated deferred income taxes are the cumulative amount by which tax expense has exceeded tax remittances. This is primarily due to tax timing differences resulting from differences between book depreciation and accelerated depreciation used for the calculation of income taxes. Mr. Lon Okada discusses accumulated deferred income taxes in detail in HECO T-15.

Q. How was the average accumulated deferred income taxes calculated?

A. Mr. Okada describes the calculation of average accumulated deferred income taxes in HECO T-15.

Q. Who provided accumulated deferred income tax funds?

A. Accumulated deferred income taxes are funds provided by ratepayers. Although rates are established based on income tax expense, tax remittances to the government on a cumulative basis have been lower than the taxes collected through rates. As a result, ratepayers have funded the accumulated deferred income tax balance. Over time, the Company will eventually pay the government the amounts recorded as deferred income taxes.

Q. Did the Commission approve the deduction of accumulated deferred income taxes from rate base in prior HECO rate cases?

A. Yes. The Commission included accumulated deferred income taxes as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision.

5) Unamortized Investment Tax Credits

Q. What is the test year estimate for unamortized investment tax credits?

A. The estimated average unamortized investment tax credit balance for test year 2007 is $29,930,000, as shown on HECO-1701.

Q. What are unamortized investment tax credits?

A. Unamortized investment tax credits are tax credits which reduce tax payments in the year the credit originates, but for ratemaking purposes, the credits are amortized. Mr. Lon Okada discusses unamortized investment tax credits in detail in HECO T-15.

Q. How was the average unamortized investment tax credit calculated?

A. Mr. Okada explains the calculation of average unamortized investment tax credit in HECO T-15.

Q. Who provides the unamortized investment tax credit funds?

A. Similar to accumulated deferred taxes, unamortized investment tax credits are funds provided by ratepayers. These funds are provided as a result of differences in timing of when the credits are taken for purposes of calculating tax payments to the government as opposed to when adjustments are made to income tax expense for ratemaking purposes.

Q. Did the Commission approve the deduction of unamortized investment tax credits from rate base in prior HECO rate cases?

A. Yes. The Commission included unamortized investment tax credits as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision as well as in the HECO 2005 Interim Decision.

<u>6) Unamortized Gain on Sales</u>

Q. What is the test year estimate of unamortized gain on sales?

A. The estimated average unamortized gain on sales balance for test year 2007 is $1,395,000 as shown on HECO-1701. In this rate base calculation, unamortized gain on sales includes the unamortized lease premium balance.

Q. What is unamortized gain on sales?

A. Unamortized gain on sales is the gain on the sale of utility property, net of the amount that has been amortized back to ratepayers. Ms. Patsy Nanbu describes unamortized gain on sales in HECO T-10.

Q. Who provided unamortized gain on sales funds?

A. The purchaser of the property provided the funds that comprise the unamortized gain on sales balance.

Q. Did the Commission deduct unamortized gain on sales from funds from investors in determining rate base in prior HECO rate cases?

A. Yes. The Commission included unamortized gain on sales as a deduction from investments in assets funded by investors in determining rate base in the HECO 1995 Decision and in the HECO 2005 Interim Decision.

7) Pension Liability

Q. What is the test year estimate of the pension liability?

A. The estimated average pension liability balance for test year 2007 is $101,942,000 as shown on HECO-1701.

Q. What is the pension liability?

A. The pension liability is to recognize the underfunded status of the pension plan. Ms. Nanbu discusses the pension liability in HECO T-10.

Q. Why is the pension liability a deduction in the calculation of rate base?

A. The pension regulatory asset, partially offset by the pension liability, is the cumulative net amount of investor-provided funds and amounts provided by ratepayers.

8) OPEB Liability

Q. What is the test year estimate of the OPEB liability?

A. The estimated average OPEB liability for test year 2007 is $37,435,000, as shown on HECO-1701.

Q. What is the OPEB liability?

A. The OPEB liability is to recognize the underfunded status of the OPEB plans and includes the transition obligation recognized when the Company adopted SFAS 106. This is discussed by Ms. Nanbu in HECO T-10.

Q. Why is the OPEB liability a deduction in the calculation of rate base?

A. The SFAS 106 OPEB regulatory asset and the SFAS 158 OPEB regulatory asset, offset by the OPEB liability, is the cumulative net amount of investor-provided funds and amounts provided by ratepayers.

SUMMARY

Q. What is your conclusion as to the rate base proposed by the Company?

A. The test year average rate base is $1,216,189,000 at present rates, $1,215,545,000 at current effective rates and $1,214,313,000 at proposed rates. This rate base represents the investment which is used or useful in providing electric utility service that has been funded by investors. The investors should be allowed the opportunity to earn a fair rate of return on this rate base.

The Company has shown the reasonableness of each of the estimates used in this calculation and has demonstrated the appropriate treatment of each of the elements in the rate base calculation. Therefore, the rate base presented by the Company is reasonable and should be used to set electric rates in this docket.

Q. Does this conclude your testimony?

A. Yes, it does.

HAWAIIAN ELECTRIC COMPANY, INC.

GAYLE T. OHASHI

EDUCATIONAL BACKGROUND AND EXPERIENCE

Business Address:	900 Richards Street Honolulu, HI 96813
Current Position:	Director, Financial Analysis Division Management Accounting and Financial Services Department
Years of Service:	16 Years
Previous Positions with Current Employer:	Director, Internal Audit Division
Previous Experience:	Auditor, Coopers & Lybrand
Education:	University of Hawaii at Manoa Bachelor of Business Administration in Accounting
Certification:	Certified Public Accountant (inactive), State of Hawaii
Previous Testimonies:	Hawaii Electric Light Company, Inc. Docket No. 05-0315 Test Year 2006 Rate Case; Rate Base Hawaiian Electric Company, Inc. Docket No. 04-0113 Test Year 2005 Rate Case, Rate Base Hawaii Electric Light Company, Inc. Docket No. 99-0207 Test Year 2000 Rate Case; Rate Base Hawaii Electric Light Company, Inc. Docket No. 97-0420 Test Year 1999 Rate Case; Rate Base Maui Electric Company, Limited Docket No. 97-0346 Test Year 1999 Rate Case; Rate Base Hawaii Electric Light Company, Inc. Docket No. 94-0079 Purchase Power Contract Negotiations with Encogen, Hawaii, L.P.; Avoided Cost Hawaii Electric Light Company, Inc. Docket No 7956 Purchase Power Contract Negotiations with Kawaihae Cogeneration Partners; Avoided Cost

Hawaiian Electric Company, Inc.

2007 Average Rate Base

($ in thousands)

Investment in Assets Serving Customers	12/31/2006	12/31/2007	Average for 2007	HECO Reference
Net Cost of Plant in Service	1,351,748	1,382,432	1,367,090	1702
Property Held for Future Use	3,380	3,380	3,380	1606
Fuel Inventory	52,706	52,706	52,706	408
Materials & Supplies Inventories	12,838	12,838	12,838	1703
Unamortized Net SFAS 109 Regulatory Asset	53,207	56,049	54,628	1507
Pension Regulatory Asset	157,466	164,909	161,188	1021
Unamortized SFAS 106 OPEB Regulatory Asset	7,811	6,509	7,160	1022
SFAS 158 OPEB Regulatory Asset	30,077	30,473	30,275	1022
Unamortized System Development Costs	0	6,018	3,009	1017
Unamortized DSG Regulatory Asset	0	645	323	1704
Working Cash at Present Rates	24,122	24,122	24,122	1706
Total Investments in Assets	1,693,355	1,740,081	1,716,718	
Funds from Non-Investors				
Unamortized CIAC	166,612	168,486	167,549	1705
Customer Advances	968	676	822	1609
Customer Deposits	6,155	6,598	6,377	802
Accumulated Deferred Income Taxes	158,171	151,990	155,081	1505
Unamortized ITC	28,984	30,875	29,930	1504
Unamortized Gain on Sales	1,582	1,207	1,395	1020
Pension Liability	89,206	114,678	101,942	1021
OPEB Liability	37,888	36,982	37,435	1022
Total Deductions	489,566	511,492	500,529	
Average Rate Base at Present Rates			1,216,189	
Change in Working Cash			(1,876)	1706
Average Rate Base at Proposed Rates			1,214,313	

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.
2007 Average Rate Base (Current Effective Rates)
($ in thousands)

Investment in Assets Serving Customers	12/31/2006	12/31/2007	Average for 2007	HECO Reference
Net Cost of Plant in Service	1,351,748	1,382,432	1,367,090	1702
Property Held for Future Use	3,380	3,380	3,380	1606
Fuel Inventory	52,706	52,706	52,706	408
Materials & Supplies Inventories	12,838	12,838	12,838	1703
Unamortized Net SFAS 109 Regulatory Asset	53,207	56,049	54,628	1507
Pension Regulatory Asset	157,466	164,909	161,188	1021
Unamortized SFAS 106 OPEB Regulatory Asset	7,811	6,509	7,160	1022
SFAS 158 OPEB Regulatory Asset	30,077	30,473	30,275	1022
Unamortized System Development Costs	0	6,018	3,009	1017
Unamortized DSG Regulatory Asset	0	645	323	1704
Working Cash at Current Effective Rates	23,478	23,478	23,478	1706(a)
Total Investments in Assets	1,692,711	1,739,437	1,716,074	
Funds from Non-Investors				
Unamortized CIAC	166,612	168,486	167,549	1705
Customer Advances	968	676	822	1609
Customer Deposits	6,155	6,598	6,377	802
Accumulated Deferred Income Taxes	158,171	151,990	155,081	1505
Unamortized ITC	28,984	30,875	29,930	1504
Unamortized Gain on Sales	1,582	1,207	1,395	1020
Pension Liability	89,206	114,678	101,942	1021
OPEB Liability	37,888	36,982	37,435	1022
Total Deductions	489,566	511,492	500,529	
Average Rate Base at Current Effective Rates			1,215,545	
Change in Working Cash			(1,232)	1706(a)
Average Rate Base at Proposed Rates			1,214,313	

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.
Net Cost of Plant in Service
($ in thousands)

	Original Cost	Accum. Depreciation, Removal Reg. Liability, Acc. Retirement Oblig.	Net Plant In Service	HECO Reference
Recorded Balances - 12/31/05	2,329,243	(1,050,582)	1,278,661	
ESTIMATED CHANGES in 2006:				
Net Plant Additions	151,452		151,452	1601
Reclassify ICS System [1]	516		516	
Cost of Removal		5,696	5,696	1309
Salvage		(219)	(219)	1309
Depreciation Accrual		(84,358)	(84,358)	1308
Retirements [2]	(10,658)	10,658	0	1309
Estimated Balances - 12/31/06	2,470,553	(1,118,805)	1,351,748	
ESTIMATED CHANGES in 2007:				
Net Plant Additions	114,706		114,706	1601
Cost of Removal		5,992	5,992	1309
Salvage		(217)	(217)	1309
Depreciation Accrual		(89,797)	(89,797)	1308
Retirements [2]	(14,035)	14,035	0	1309
Estimated Balances - 12/31/07	2,571,224	(1,188,792)	1,382,432	
AVERAGE 2007 BALANCE			**1,367,090**	

NOTE: Totals may not add exactly due to rounding.

[1] Represents the net book value of certain assets in the Interisland Communication System ("ICS") reclassified to utility property from non-utility property. While ICS is no longer being used, certain of the assets are now being utilized for utility purposes.

[2] Original cost of estimated retirements for the respective year.

Hawaiian Electric Company, Inc.

Materials & Supplies Inventory

($ in thousands)

	12/31/2006	12/31/2007	Average for 2007	HECO Reference
Production Inventory	6,989	6,989	6,989	605
Adjustment to Inventory related to Accounts Payable	(311)	(311)	(311)	WP-1703, p.1
Adjusted Production Inventory	6,678	6,678	6,678	(a)
Transmission & Distribution Inventory	6,636	6,636	6,636	703
Adjustment to Inventory related to Accounts Payable	(476)	(476)	(476)	WP-1703, p.1
Adjusted T&D Inventory	6,160	6,160	6,160	(b)
Total Materials & Supplies	12,838	12,838	12,838	(a) + (b)

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Unamortized DSG Regulatory Asset

($ in thousands)

			HECO Reference
RECORDED BALANCES - 12/31/06	0	(A)	
ESTIMATED CHANGES in 2007:			
DSG Contribution	675		628
Amortization	(30)		628
ESTIMATED BALANCE - 12/31/07	645	(B)	
AVERAGE 2007 BALANCE	323	[(A)+(B)]/2	

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Unamortized Contributions In Aid of Construction

($ in thousands)

		HECO Reference
RECORDED BALANCES - 12/31/05	156,287	
ESTIMATED CHANGES in 2006:		
Cash Receipts	12,046	1608
In-Kind Receipts	6,317	1608
Transfer from Advances	23	1608
Amortization	(8,061)	1308
ESTIMATED BALANCE - 12/31/06	166,612	
ESTIMATED CHANGES in 2007:		
Cash Receipts	6,148	1608
In-Kind Receipts	4,011	1608
Transfer from Advances	283	1608
Amortization	(8,568)	1308
ESTIMATED BALANCE - 12/31/07	168,486	
AVERAGE 2007 BALANCE	167,549	

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

WORKING CASH ITEMS, 2007

($ in thousands)

	(A) Revenue Collection Lag (Days)	Payment Lag Workpaper Reference	(B) Payment Lag (Days)	(C) Net Collection Lag (Days) (A) - (B)	Annual Amount Workpaper Reference	(D) Annual Amount	(E) Average Daily Amount - Present (D) / 365	(F) Working Cash Required (Provided) under Present Rates (C) x (E)	(G) Average Daily Amount - Proposed (D) / 365	(H) Working Cash Required (Provided) under Proposed Rates (C) x (G)
	per HECO T-8	HECO WP-1706			HECO WP-2302					
ITEMS REQUIRING WORKING CASH:										
Fuel Purchases	37	p. 1	17	20	p. 10	536,833	1,471	29,416	1,471	29,416
O&M Labor	37	p. 8	11	26	p. 11	89,425	245	6,370	245	6,370
O&M Nonlabor	37	p. 32	27	10	p. 11	118,090	324	3,235	324	3,235
ITEMS PROVIDING WORKING CASH:										
Purchased Power	37	p. 37	39	(2)	p. 10	386,108	1,058	(2,116)	1,058	(2,116)
Revenue Taxes - Present Rates	37	p. 43	76	(39)	p. 6	119,722	328	(12,792)		
Revenue Taxes - Proposed Rates	37	p. 43	76	(39)	p. 6	133,149			365	(14,227)
Income Taxes - Present Rates	37	p. 46	40	(3)	p. 9	(1,138)	(3)	9		
Income Taxes - Proposed Rates	37	p. 46	40	(3)	p. 9	52,529			144	(432)
Total WORKING CASH								24,122		22,247
Change in WORKING CASH										**(1,876)**

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

WORKING CASH ITEMS, 2007 (Current Effective Rates)

($ in thousands)

	(A) Revenue Collection Lag (Days)	Payment Lag Workpaper Reference	(B) Payment Lag (Days)	(C) Net Collection Lag (Days) (A) - (B)	Annual Amount Workpaper Reference	(D) Annual Amount	(E) Average Daily Amount - Effective (D) / 365	(F) Working Cash Required (Provided) under Effective Rates (C) x (E)	(G) Average Daily Amount - Proposed (D) / 365	(H) Working Cash Required (Provided) under Proposed Rates (C) x (G)
	per HECO T-8	HECO WP-1706			HECO WP-2301					
ITEMS REQUIRING WORKING CASH:										
Fuel Purchases	37	p. 1	17	20	p. 10	536,833	1,471	29,416	1,471	29,416
O&M Labor	37	p. 8	11	26	p. 11	89,425	245	6,370	245	6,370
O&M Nonlabor	37	p. 32	27	10	p. 11	118,090	324	3,235	324	3,235
ITEMS PROVIDING WORKING CASH:										
Purchased Power	37	p. 37	39	(2)	p. 10	386,108	1,058	(2,116)	1,058	(2,116)
Revenue Taxes - Effective Rates	37	p. 43	76	(39)	p. 6	124,332	341	(13,285)		
Revenue Taxes - Proposed Rates	37	p. 43	76	(39)	p. 6	133,149			365	(14,227)
Income Taxes - Effective Rates	37	p. 46	40	(3)	p. 9	17,261	47	(142)		
Income Taxes - Proposed Rates	37	p. 46	40	(3)	p. 9	52,528			144	(432)
Total WORKING CASH								23,479		22,247
Change in WORKING CASH										**(1,232)**

NOTE: Totals may not add exactly due to rounding.